Homework and Remembering

HOUGHTON MIFFLIN HARCOURT

MATH Expressions

Common Core

GRADE 5

Volume 1

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1-1

Homework

Name **Date**

Use the fraction bar below for Exercises 1–4.

1. Label the first part of this fraction bar with the correct unit fraction.

2. Circle the first four parts of the bar. What fraction of the whole does this circled portion represent?

_____

3. Write your fraction from Exercise 2 as a sum of unit fractions.

_____

4. Represent the whole as the sum of the unit fractions.

_____

5. Solve the problem below by circling parts of the fraction bar. Write the appropriate equation below the bar.

Brett is building a fence around his yard. He has worked on it for two weeks so far. He finished $\frac{2}{8}$ the first week and $\frac{3}{8}$ the second week. What fraction of the entire fence has he built?

_____

Eighths 

6. Nena thinks that because $4 < 6$, it must also be true that $\frac{1}{4} < \frac{1}{6}$. Explain to Nena why this is incorrect.

_____

_____

_____

_____

1-1 Name _____ Date _____

Remembering

List all the factors of each number.

1. 16 _____

2. 29 _____

3. 33 _____

4. 40 _____

List the first four multiples of each number.

5. 6 _____

6. 11 _____

7. 15 _____

8. 1 _____

Complete.

9. $\frac{1}{3} + \frac{1}{3} =$ _____

10. $\frac{2}{7} + \frac{3}{7} =$ _____

11. $\frac{6}{10} - \frac{5}{10} =$ _____

12. $\frac{4}{6} + \frac{2}{6} =$ _____

13. $\frac{4}{9} - \frac{2}{9} =$ _____

14. $\frac{1}{10} + \frac{1}{10} + \frac{1}{10} =$ _____

Write an equation. Then solve the problem.

15. Maggie has a ribbon 27 feet long. What is the length of the ribbon in yards?

Equation: _____

Answer: _____

16. Mañuel has 15 goldfish. This is 6 more than Quinn has. How many goldfish does Quinn have?

Equation: _____

Answer: _____

17. In their yearbook photo, students in the chorus stood in four rows with 13 students in each row. How many students are in the photo?

Equation: _____

Answer: _____

18. Julie bought 19 beads at the craft store. Now she has 36 beads. How many beads did she have before she went to the craft store?

Equation: _____

Answer: _____

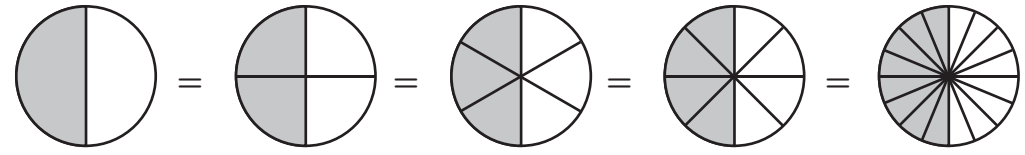
19. Stretch Your Thinking Rashid bought some baseball cards. After giving 7 cards to his friend Grace, he arranged the remaining cards in 6 rows of 4. How many cards did he buy?

Equation: _____

Answer: _____

Name _____ Date _____

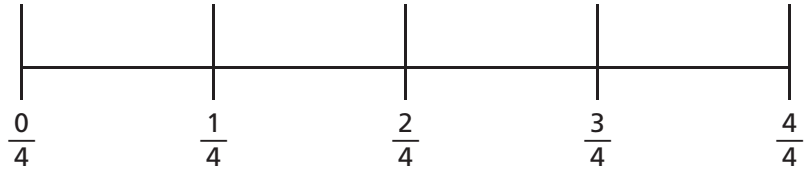
1. Write a chain of equivalent fractions for the shaded parts.



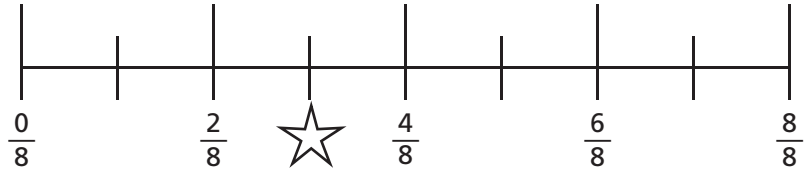
_____ = _____ = _____ = _____ = _____

Use the number lines to complete Exercises 2–7.

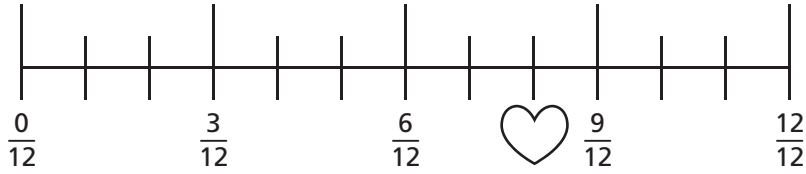
Fourths



Eighths



Twelfths



2. What fraction is marked by the star? _____

3. What fraction is marked by the heart? _____

4. If you have $\frac{3}{4}$ cup of flour, how many eighths do you have?

_____

5. If you have $\frac{3}{12}$ of an orange, how many fourths do you have?

_____

6. Which is greater, $\frac{3}{4}$ or $\frac{10}{12}$? _____

7. Give two equivalent fractions for $\frac{6}{8}$. _____

1-2 Name _____ Date _____

Remembering

Add or subtract.

1. 4,560 + 52,973 = _____

2. 581,002 + 26,596 = _____

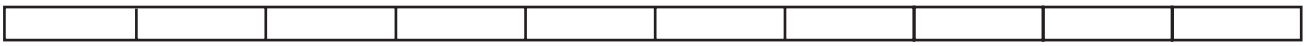
3. 4,300,129 + 3,426 = _____

4. 398,000 − 213,546 = _____

5. Solve the problem below by circling parts of the fraction bar. Write the appropriate equation below the bar.

Molly is driving across the country. She covered $\frac{2}{10}$ of the distance on the first day and $\frac{3}{10}$ on the second day. What fraction of the distance did she cover in the first two days?

_____



Complete.

6. $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$ _____

7. $\frac{7}{10} + \frac{3}{10} =$ _____

8. $\frac{4}{5} - \frac{1}{5} =$ _____

9. $\frac{8}{10} +$ _____ $= 1$

10. _____ $+ \frac{2}{3} = 1$

11. $1 - \frac{3}{4} =$ _____

12. Stretch Your Thinking Alyssa said that $\frac{6}{8}$ and $\frac{9}{12}$ are not equivalent because there is no whole number you can multiply both parts of $\frac{6}{8}$ by to get $\frac{9}{12}$. Is she correct? Explain.

_____

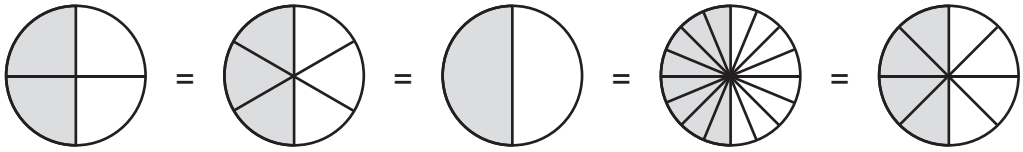
_____

_____

_____

Name _____ Date _____

1. Write a chain of equivalent fractions for the shaded parts.



_____ = _____ = _____ = _____ = _____

Write the multiplier or divisor for each pair of equivalent fractions.

2. $\frac{4}{12} = \frac{1}{3}$

Divisor = _____

3. $\frac{2}{9} = \frac{6}{27}$

Multiplier = _____

4. $\frac{6}{60} = \frac{1}{10}$

Divisor = _____

5. $\frac{3}{10} = \frac{15}{50}$

Multiplier = _____

6. $\frac{21}{56} = \frac{3}{8}$

Divisor = _____

7. $\frac{5}{7} = \frac{30}{42}$

Multiplier = _____

8. $\frac{4}{16} = \frac{1}{4}$

Divisor = _____

9. $\frac{5}{9} = \frac{25}{45}$

Multiplier = _____

10. $\frac{10}{60} = \frac{1}{6}$

Divisor = _____

11. $\frac{3}{7} = \frac{18}{42}$

Multiplier = _____

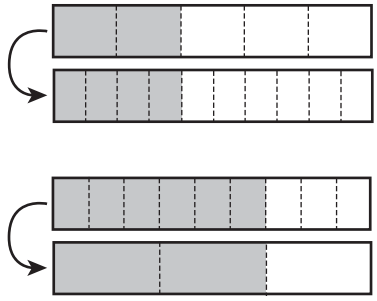
12. $\frac{24}{56} = \frac{3}{7}$

Divisor = _____

13. $\frac{5}{6} = \frac{35}{42}$

Multiplier = _____

Complete each exercise about the pairs of fraction bars.



14. What equivalent fractions are shown? _____

15. Identify the multiplier. _____

16. What equivalent fractions are shown? _____

17. Identify the divisor. _____

18. Write a chain with at least six equivalent fractions.

_____ = _____ = _____ = _____ = _____ = _____

1-3 Name Date

Remembering

In Exercises 1–3, use this fraction bar.

1. Shade two of the equal parts. What fraction does the shaded portion model?

_____

2. Split each equal part (each unit fraction) into two equal parts. What fraction does the shaded portion model now?

_____

3. Fill in the boxes to show how you unsimplified the original fraction.

$$\frac{2 \times \square}{3 \times \square} = \frac{\square}{\square}$$

Solve. *Show your work.*

4. A restaurant has 60 plates. One night, 9 groups of 6 people ate dinner at the restaurant at the same time. How many plates were not used by these diners?

_____

5. Clara has a garden that is 7 feet wide and 4 feet long. She has 30 tomato plants to put in the garden. Each plant needs 1 square foot of space. How many leftover plants will Clara have?

_____

6. Stretch Your Thinking Carol's bookshelf has 4 shelves with 6 books on each. Her brother Robert has 3 shelves with 7 books on each. They want to combine their books. If they put 9 books on a shelf, how many shelves will they need?

_____

1-4

Homework

Name _____ Date _____

Compare.

1. $\frac{5}{8} \bigcirc \frac{5}{9}$

2. $\frac{1}{5} \bigcirc \frac{1}{4}$

3. $\frac{2}{5} \bigcirc \frac{3}{5}$

4. $\frac{6}{8} \bigcirc \frac{2}{3}$

5. $\frac{10}{11} \bigcirc \frac{11}{12}$

6. $\frac{3}{8} \bigcirc \frac{5}{12}$

7. $\frac{5}{12} \bigcirc \frac{4}{7}$

8. $\frac{1}{3} \bigcirc \frac{4}{9}$

9. $\frac{1}{4} \bigcirc \frac{2}{9}$

10. $\frac{1}{12} \bigcirc \frac{1}{15}$

11. $\frac{7}{10} \bigcirc \frac{11}{15}$

12. $\frac{12}{25} \bigcirc \frac{51}{100}$

Solve. *Show your work.*

13. During his first season on the school football team, Wade made 5 of the 9 field goals he tried. During his second season, he made 11 of the 15 field goals he tried. In which season did he make the greater fraction of the field goals he tried?

_____

14. Mañuela bought $\frac{11}{12}$ yard of polka dot fabric and $\frac{7}{9}$ yard of flowered fabric. Which fabric did she buy more of?

_____

15. Of the 7 pens in Ms. Young's desk, 3 are blue. Of the 9 pens in Mr. Fox's desk, 5 are blue. Which teacher has a greater fraction of pens that are blue?

_____

16. Mr. Sommers spent 10 minutes of his 50-minute math period reviewing homework. Mr. Young spent 12 minutes of his 60-minute math period reviewing homework. Which teacher spent a greater fraction of his math period reviewing homework?

_____

1-4 Name _____ Date _____

Remembering

Complete.

1. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$ _____

2. $\frac{8}{9} - \frac{4}{9} =$ _____

3. $\frac{4}{5} + \frac{1}{5} =$ _____

4. $\frac{3}{8} + \frac{3}{8} =$ _____

Write the multiplier or divisor for each pair of equivalent fractions.

5. $\frac{5}{6} = \frac{10}{12}$
   Multiplier = _____

6. $\frac{12}{15} = \frac{4}{5}$
   Divisor = _____

7. $\frac{3}{4} = \frac{18}{24}$
   Multiplier = _____

8. $\frac{25}{50} = \frac{5}{10}$
   Divisor = _____

9. $\frac{1}{4} = \frac{7}{28}$
   Multiplier = _____

10. $\frac{11}{22} = \frac{1}{2}$
    Divisor = _____

Complete the chain of equivalent fractions.

11. $\frac{2}{5} =$ _____ = _____ = _____ = _____ = _____ = _____

12. $\frac{5}{9} =$ _____ = _____ = _____ = _____ = _____ = _____

Solve.

13. **Stretch Your Thinking** Harry ate $\frac{4}{8}$ of a large pizza. Aidan ate $\frac{1}{2}$ of a small pizza. Harry said that since $\frac{4}{8}$ is equivalent to $\frac{1}{2}$, he and Aidan ate the same amount of pizza. Is he correct? Explain.

_____

_____

_____

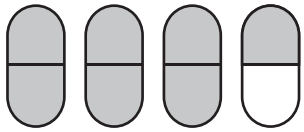
_____

1-5

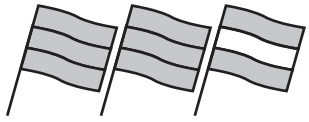
Homework

Name _____ Date _____

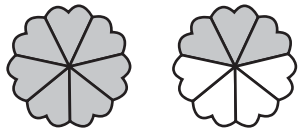
Name the mixed number shown by the shaded parts.



1. _____



2. _____



3. _____

Write the mixed number as a fraction.

4. $2\frac{1}{3} =$ _____ **5.** $4\frac{2}{5} =$ _____ **6.** $3\frac{3}{4} =$ _____ **7.** $1\frac{5}{8} =$ _____

Write the fraction as a mixed number.

8. $\frac{7}{6} =$ _____ **9.** $\frac{8}{3} =$ _____ **10.** $\frac{9}{2} =$ _____ **11.** $\frac{10}{7} =$ _____

Complete. Give the answer as a mixed number.

12. $\frac{3}{5} + \frac{4}{5} =$ _____ **13.** $\frac{6}{4} + \frac{3}{4} =$ _____

14. $\frac{2}{9} + \frac{8}{9} =$ _____ **15.** $7 + \frac{2}{3} =$ _____

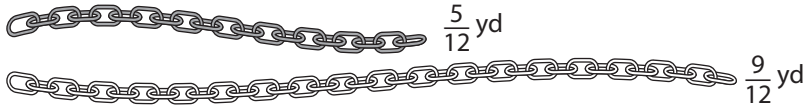
Solve. *Show your work.*

16. Alicia walked $\frac{7}{8}$ mile on Saturday and $\frac{6}{8}$ mile on Sunday. How far did she walk over the weekend? Give the answer as a mixed number.

_____

17. The dark chain is $\frac{5}{12}$ yard long. The light one is $\frac{9}{12}$ yard long. How long will they be if they are joined? Give the answer as a mixed number.

_____



1-5 Name _____ Date _____

Remembering

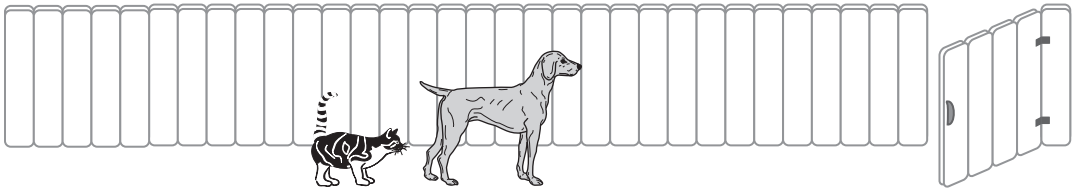
Solve.

1. The dog has gone $\frac{5}{8}$ of the way across the yard. How much farther does it have to go to reach the gate?

_____

2. The cat has gone $\frac{7}{16}$ of the way across the yard. How much farther does it have to go to reach the gate?

_____



3. I cleaned $\frac{6}{9}$ of my room, and my friend cleaned $\frac{2}{9}$ of my room. How much of my room do we still have to clean?

_____

4. Mrs. Spencer's class is signing up to play sports. $\frac{8}{26}$ of the students want to play soccer and $\frac{12}{26}$ want to play basketball. The rest of the students want to play baseball. What fraction of the students wants to play baseball?

_____

Compare.

5. $\frac{2}{6}$ ◯ $\frac{1}{6}$

6. $\frac{4}{9}$ ◯ $\frac{4}{10}$

7. $\frac{7}{12}$ ◯ $\frac{13}{24}$

8. $\frac{3}{5}$ ◯ $\frac{1}{3}$

9. $\frac{4}{6}$ ◯ $\frac{6}{9}$

10. $\frac{4}{5}$ ◯ $\frac{5}{6}$

11. $\frac{7}{12}$ ◯ $\frac{3}{4}$

12. $\frac{3}{5}$ ◯ $\frac{4}{9}$

13. $\frac{7}{9}$ ◯ $\frac{7}{8}$

14. Stretch Your Thinking Find two fractions that are between $\frac{3}{5}$ and $\frac{4}{5}$.

_____

1-6

Homework

Name _____ Date _____

Add or subtract.

1. $\frac{3}{5} + \frac{4}{5}$

2. $\frac{6}{4} + \frac{3}{4}$

3. $4\frac{2}{9} + 2\frac{7}{9}$

4. $1\frac{7}{8} + 3\frac{3}{8}$

5. $1\frac{7}{9} - \frac{4}{9}$

6. $4\frac{6}{7} - 2\frac{5}{7}$

7. $6\frac{4}{5} - 3\frac{2}{5}$

8. $25\frac{5}{8} - 10\frac{1}{8}$

9. $4\frac{1}{2} + 5\frac{1}{2}$

10. $3\frac{1}{7} + 2\frac{1}{7}$

11. $1\frac{5}{7} + 1\frac{3}{7}$

12. $50\frac{1}{3} + 50\frac{1}{3}$

13. $2 - \frac{1}{3}$

14. $5\frac{3}{8} - 2\frac{7}{8}$

15. $2\frac{1}{6} - 1\frac{5}{6}$

Solve.

Show your work.

16. I made a clay snake $9\frac{5}{8}$ inches long, but a section $1\frac{7}{8}$ inches long broke off. How long is the snake now?

_____

17. A group of campers hiked for $5\frac{3}{4}$ hours today and $6\frac{3}{4}$ hours yesterday. How many hours did they hike in all?

_____

18. Deacon had $12\frac{1}{3}$ ounces of juice, but he drank $3\frac{2}{3}$ ounces. How much juice is left?

_____

Name _____ Date _____

Remembering

Complete to form equivalent fractions.

1. $\frac{1}{2} = \frac{4}{\square}$

2. $\frac{12}{\square} = \frac{4}{5}$

3. $\frac{6}{7} = \frac{\square}{28}$

4. $\frac{4}{\square} = \frac{\square}{9}$

5. $\frac{25}{100} = \frac{\square}{\square}$

6. $\frac{\square}{8} = \frac{3}{\square}$

Compare.

7. $\frac{3}{10} \bigcirc \frac{3}{8}$

8. $\frac{4}{5} \bigcirc \frac{5}{6}$

9. $\frac{5}{7} \bigcirc \frac{2}{3}$

10. $\frac{5}{6} \bigcirc \frac{19}{24}$

11. $\frac{4}{15} \bigcirc \frac{3}{10}$

12. $\frac{1}{49} \bigcirc \frac{1}{50}$

Solve.

Show your work.

13. Rosa got 5 out of 7 answers correct on her science quiz. Her older sister Ana got 4 answers out of 6 correct on her science quiz. Which sister answered a greater fraction of the questions correctly?

_____

14. The number 85% is equivalent to the fraction $\frac{85}{100}$. Pablo spelled 21 out of 25 words correctly on his spelling test. Is this more or less than 85% of the words?

_____

15. Stretch Your Thinking Marla ate $\frac{3}{8}$ of a small pepperoni pizza and $\frac{2}{8}$ of a small cheese pizza. Damien ate $\frac{3}{12}$ of a small veggie pizza and $\frac{5}{12}$ of a small mushroom pizza. Who ate a greater fraction of a whole pizza?

_____

1-7

Homework

Name _____ **Date** _____

Add.

1. $\frac{1}{3} + \frac{1}{2}$

2. $\frac{7}{10} + \frac{1}{5}$

3. $\frac{2}{9} + \frac{1}{6}$

4. $\frac{5}{32} + \frac{1}{4}$

5. $\frac{1}{6} + \frac{2}{3}$

6. $\frac{5}{11} + \frac{1}{2}$

7. $\frac{3}{16} + \frac{3}{4}$

8. $\frac{3}{7} + \frac{1}{3}$

9. $\frac{5}{12} + \frac{3}{8}$

Solve. *Show your work.*

10. Of the people who attended the school play, $\frac{5}{12}$ were students and $\frac{1}{8}$ were teachers. What fraction of the total audience were students or teachers?

_____

11. Mara bought $\frac{2}{3}$ yard of yellow ribbon and $\frac{1}{4}$ yard of blue ribbon. How many yards of ribbon did she buy altogether?

_____

12. For breakfast, Oliver drank $\frac{5}{16}$ of a pitcher of juice. His brother Joey drank $\frac{3}{8}$ of the pitcher of juice. What fraction of a pitcher did they drink together?

_____

13. A recipe calls for $\frac{1}{3}$ cup of brown sugar and $\frac{3}{4}$ cup of white sugar. How much sugar is this altogether?

_____

Name _____ Date _____

Remembering

Solve for *n* or *d*.

1. $\frac{1}{6} = \frac{n}{24}$ _____ **2.** $\frac{3}{4} = \frac{15}{d}$ _____ **3.** $\frac{9}{54} = \frac{1}{d}$ _____ **4.** $\frac{10}{18} = \frac{n}{9}$ _____

5. $\frac{3}{7} = \frac{18}{d}$ _____ **6.** $\frac{3}{5} = \frac{n}{40}$ _____ **7.** $\frac{27}{36} = \frac{n}{4}$ _____ **8.** $\frac{14}{49} = \frac{2}{d}$ _____

9. $\frac{5}{6} = \frac{n}{48}$ _____ **10.** $\frac{1}{3} = \frac{20}{d}$ _____ **11.** $\frac{21}{56} = \frac{3}{d}$ _____ **12.** $\frac{20}{25} = \frac{n}{5}$ _____

Add or subtract.

13. $1\frac{1}{3} + 2\frac{1}{3}$ _____ **14.** $3\frac{3}{5} - 1\frac{1}{5}$ _____ **15.** $6\frac{3}{8} + 3\frac{5}{8}$ _____

16. $6\frac{3}{8} - 3\frac{5}{8}$ _____ **17.** $1\frac{5}{6} + 2\frac{5}{6}$ _____ **18.** $7 - 5\frac{1}{4}$ _____

Compare.

19. $\frac{3}{4} \bigcirc \frac{6}{7}$ **20.** $\frac{7}{15} \bigcirc \frac{2}{5}$ **21.** $\frac{1}{8} \bigcirc \frac{3}{20}$

22. $\frac{6}{100} \bigcirc \frac{6}{101}$ **23.** $\frac{19}{20} \bigcirc \frac{20}{21}$ **24.** $\frac{4}{5} \bigcirc \frac{7}{9}$

Solve. *Show your work.*

25. In a hockey game, Seth took 12 shots and scored 3 times. Zak took 10 shots and scored twice. Who scored on a greater fraction of his shots?

_____

26. Jia rode her bike $7\frac{7}{8}$ miles in the morning and another $6\frac{5}{8}$ miles in the afternoon. How many miles did she ride altogether?

_____

27. Stretch Your Thinking Last season, Jenny made 3 out of every 4 free throws she took. If she took 48 free throws, how many did she make?

_____

1-8 **Homework**

Name _____ Date _____

Subtract.

1. $\frac{1}{3} - \frac{1}{7}$

2. $\frac{4}{5} - \frac{8}{15}$

3. $\frac{5}{6} - \frac{2}{9}$

4. $\frac{61}{100} - \frac{7}{25}$

5. $\frac{4}{7} - \frac{1}{6}$

6. $\frac{6}{11} - \frac{1}{2}$

Circle the greater fraction. Then write and solve a subtraction problem to find the difference of the fractions.

7. $\frac{9}{10}$ $\frac{11}{12}$ _____

8. $\frac{5}{18}$ $\frac{1}{3}$ _____

Solve. *Show your work.*

9. Marly passes the library on her way to school. The distance from Marly's house to the library is $\frac{3}{8}$ mile. The distance from Marly's house to the school is $\frac{4}{5}$ mile. How far is it from the library to Marly's school?

_____

10. Tim spends about $\frac{1}{3}$ of each weekday sleeping and about $\frac{7}{24}$ of each weekday in school.

a. What fraction of a weekday does Tim spend either sleeping or in school?

_____

b. Is this more or less than $\frac{1}{2}$ a day? _____

c. How much more or less? _____

1-8 Name _____ Date _____

Remembering

Write each fraction as a mixed number.

1. $\frac{11}{5} =$ _____ **2.** $\frac{21}{8} =$ _____ **3.** $\frac{57}{6} =$ _____

Write each mixed number as a fraction.

4. $1\frac{5}{6} =$ _____ **5.** $11\frac{2}{3} =$ _____ **6.** $6\frac{1}{9} =$ _____

Add or subtract.

7. $\frac{3}{7} + \frac{2}{7}$ **8.** $\frac{7}{10} - \frac{3}{10}$ **9.** $\frac{3}{10} + \frac{2}{5}$

10. $2\frac{1}{6} + 3\frac{5}{6}$ **11.** $6\frac{11}{12} - 2\frac{5}{12}$ **12.** $5\frac{1}{3} - 1\frac{2}{3}$

13. $4\frac{3}{4} + 4\frac{3}{4}$ **14.** $4 - 3\frac{5}{8}$ **15.** $\frac{3}{11} + \frac{1}{3}$

Solve. *Show your work.*

16. Ayala and Sam were partners on a science project. Ayala spent $2\frac{3}{4}$ hours working on the project. Sam spent $1\frac{3}{4}$ hours working on the project. How long did they work altogether?

_____

17. Stretch Your Thinking Marti grouped all her CDs into separate categories. She said, "$\frac{2}{5}$ of my CDs are rock music, $\frac{1}{6}$ are jazz, $\frac{1}{3}$ are hip hop, and $\frac{1}{4}$ are country music." Explain why Marti's statement cannot be correct.

_____

_____

_____

1-9

Homework

Name _____ **Date** _____

Add or subtract.

1. $7\frac{1}{2} + 6\frac{5}{8}$

2. $2\frac{3}{5} + 5\frac{1}{4}$

3. $5\frac{3}{8} + 2\frac{3}{4}$

4. $3\frac{4}{15} - 1\frac{1}{5}$

5. $9\frac{5}{6} - 4\frac{1}{8}$

6. $1\frac{1}{9} + 3\frac{5}{8}$

7. $8\frac{1}{6} - 2\frac{7}{12}$

8. $6\frac{7}{9} - 4\frac{2}{3}$

9. $3\frac{9}{14} - 1\frac{2}{7}$

Solve. *Show your work.*

10. Last year my elm tree was $8\frac{5}{6}$ feet tall. This year it is $10\frac{1}{12}$ feet tall. How much did it grow in one year?

_____

11. Luis rode his bicycle $2\frac{3}{10}$ miles before lunch. He rode $1\frac{1}{4}$ miles after lunch. How far did Luis ride altogether?

_____

12. Carrie spent $2\frac{1}{2}$ hours trimming bushes and $1\frac{1}{4}$ hours weeding the garden. She is supposed to work in the yard for 5 hours. How much longer does she need to work?

_____

1-9 Name _____ Date _____

Remembering

Add or subtract. Try to do these in your head.

1. $3\frac{1}{4} + 2\frac{3}{4} =$ _____

2. $2\frac{3}{4} - \frac{1}{4} =$ _____

3. $3\frac{2}{5} + 4\frac{4}{5} =$ _____

4. $6\frac{6}{7} - 5\frac{2}{7} =$ _____

5. $8\frac{2}{3} + 1\frac{2}{3} =$ _____

6. $5\frac{6}{7} - 1\frac{2}{7} =$ _____

7. $3\frac{3}{5} + 3\frac{3}{5} =$ _____

8. $7\frac{7}{8} - 3\frac{3}{8} =$ _____

9. $5\frac{3}{8} + 3\frac{5}{8} =$ _____

Write the fractions in order from least to greatest.

10. $\frac{1}{9}, \frac{1}{3}, \frac{1}{6}, \frac{1}{2}$ _____

11. $\frac{4}{9}, \frac{2}{9}, \frac{8}{9}, \frac{1}{9}$ _____

12. $\frac{2}{3}, \frac{3}{5}, \frac{1}{2}, \frac{3}{4}$ _____

13. $\frac{11}{15}, \frac{3}{5}, \frac{2}{3}, \frac{19}{30}$ _____

List three fractions equivalent to the given fraction.

14. $\frac{1}{5}$ _____

15. $\frac{15}{18}$ _____

16. $\frac{4}{7}$ _____

17. $\frac{9}{12}$ _____

Solve. *Show your work.*

18. Ted is making a bread recipe that uses $3\frac{1}{4}$ cups of flour and a muffin recipe that uses $2\frac{3}{4}$ cups of flour.

a. How much more flour is in the bread than in the muffins?

_____

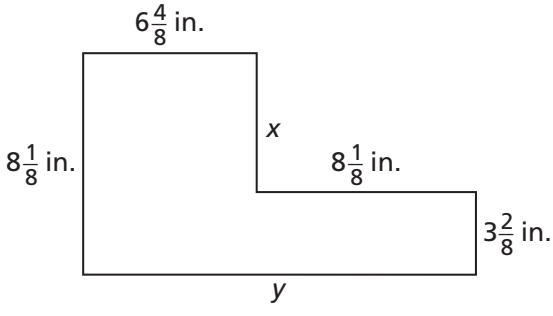
b. How much flour does Ted need for both recipes?

_____

19. Stretch Your Thinking Find the values of x and y in the drawing at the right.

$x =$ _____ inches

$y =$ _____ inches



1-10

Homework

Name _____ Date _____

Add or subtract.

1. $3 - 1\frac{2}{5}$

2. $2\frac{7}{10} + 2\frac{4}{5}$

3. $7\frac{5}{9} - 3\frac{2}{15}$

4. $4\frac{5}{6} + \frac{6}{7}$

5. $5\frac{1}{8} - 4\frac{1}{5}$

6. $4\frac{79}{100} + 5\frac{9}{10}$

7. $\frac{13}{16} + \frac{2}{3}$

8. $8\frac{1}{4} - 3\frac{9}{20}$

9. $7\frac{8}{9} + 9\frac{7}{8}$

Solve.

10. The Taylors have four dogs. Molly eats $4\frac{1}{2}$ cups of food each day, Roscoe eats $3\frac{2}{3}$ cups, Milo eats $1\frac{3}{4}$ cups, and Fifi eats $\frac{3}{4}$ cup. How much do the Taylors' dogs eat each day altogether?

_____

11. Refer to Problem 10. How much more food does Molly eat each day than Roscoe?

_____

12. The vet told the Taylors (from Problem 10) to decrease the amount Molly eats by $\frac{3}{4}$ cup. After Molly's food is adjusted, will she eat more or less than Roscoe each day? How much more or less?

_____

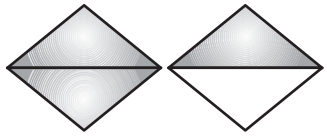
Name _____ Date _____

Remembering

What mixed number is shown by each shaded part?

1. 

_____

2. 

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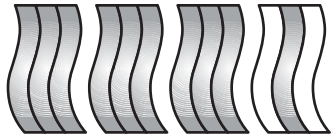
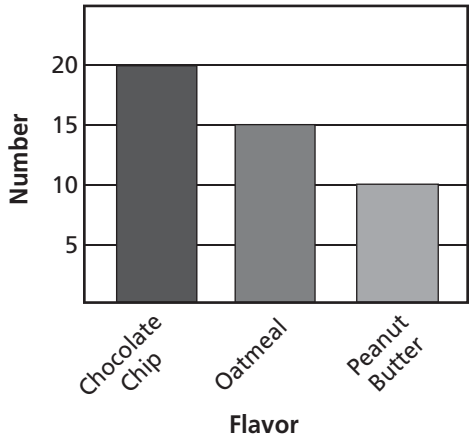
3. 

_____

Answer the questions about the bar graph. Give your answers as simple fractions.



4. How many cookies are there altogether? _____

5. What fraction of the cookies are chocolate chip?

_____

6. What fraction of the cookies are oatmeal? _____

7. What fraction of the cookies are peanut butter?

_____

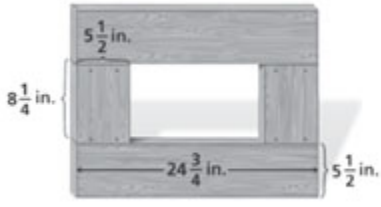
8. Melanie baked 25 cookies. Did she bake more or less than half of the cookies? _____

How do you know?

_____

_____

9. Stretch Your Thinking Colby nailed together four wood boards as shown at the right. All four boards are $5\frac{1}{2}$ inches wide.



a. Find the perimeter of the outside rectangle.

_____

b. Find the perimeter of the inside rectangle.

_____

1-11

Homework

Name _____ Date _____

Use benchmarks of 0, $\frac{1}{2}$, and 1 to estimate the sum or difference. Then find the actual sum or difference.

1. $\frac{2}{5} + \frac{4}{7}$

Estimate: _____

Sum: _____

2. $\frac{13}{20} - \frac{3}{10}$

Estimate: _____

Difference: _____

3. $\frac{13}{18} + \frac{1}{2}$

Estimate: _____

Sum: _____

Estimate the sum or difference by rounding each mixed number to the nearest whole number. Then find the actual sum or difference.

4. $3\frac{5}{8} - 1\frac{1}{2}$

Estimate: _____

Difference: _____

5. $6\frac{4}{9} + 5\frac{7}{12}$

Estimate: _____

Sum: _____

6. $7\frac{11}{18} - 4\frac{1}{15}$

Estimate: _____

Difference: _____

Tell whether the answer is reasonable or unreasonable. Explain how you decided.

7. $2\frac{1}{5} + 5\frac{1}{3} = 7\frac{8}{15}$

_____

_____

_____

8. $\frac{7}{8} - \frac{2}{11} = \frac{9}{19}$

_____

_____

_____

9. $\frac{3}{8} + \frac{4}{5} = \frac{7}{40}$

_____

_____

_____

10. $4\frac{1}{3} - 1\frac{5}{6} = 2\frac{1}{2}$

_____

_____

_____

Solve.

11. Estimate the difference $8\frac{7}{12} - 4\frac{7}{8} - \frac{4}{10}$. Explain how you found the answer.

_____

_____

_____

Name _____ Date _____

Remembering

Add or subtract. Give your answer in simplest form.

1. $4 - 3\frac{7}{8}$

2. $5\frac{1}{2} + 6\frac{3}{4}$

3. $3\frac{1}{10} - 1\frac{5}{6}$

4. $\frac{6}{7} + \frac{3}{5}$

5. $10\frac{3}{8} - 1\frac{7}{8}$

6. $2\frac{13}{25} + 3\frac{99}{100}$

Compare.

7. $\frac{5}{7} \bigcirc \frac{5}{9}$

8. $\frac{99}{100} \bigcirc \frac{100}{101}$

9. $\frac{7}{15} \bigcirc \frac{9}{20}$

10. $\frac{6}{11} \bigcirc \frac{4}{9}$

11. $\frac{1}{21} \bigcirc \frac{1}{22}$

12. $\frac{5}{16} \bigcirc \frac{1}{4}$

Solve. *Show your work.*

13. On the first math test, Octavia answered 24 out of 30 questions correctly. On the second math test, she answered 19 out of 25 questions correctly. On which test did she answer the greater fraction of the questions correctly?

_____

14. Stretch Your Thinking Isidro is riding his bike 22 miles to the art museum. He rode $7\frac{1}{2}$ miles and then took a break. Since his break, he has ridden $5\frac{7}{10}$ mile. How much farther does he have to ride to get to the museum?

_____

Homework

Name _____ Date _____

Solve. Explain why your answer is reasonable. *Show your work.*

1. Zoe had a board $5\frac{1}{4}$ feet long. She cut off a piece. Now the board is $3\frac{5}{6}$ feet long. How long was the piece she cut off?

Answer: _____

Why is the answer reasonable?

_____

_____

2. A rectangle has a length of $10\frac{3}{16}$ inches and a width of $6\frac{7}{8}$ inches. What is the perimeter of the rectangle?

Answer: _____

Why is the answer reasonable?

_____

_____

3. Max is making trail mix. He combines $\frac{2}{5}$ pound of dried fruit and $\frac{1}{3}$ pound of mixed nuts. He adds sunflower seeds to make a total of 1 pound. What is the weight of the seeds?

Answer: _____

Why is the answer reasonable?

_____

_____

4. At the start of party, a bowl contains 16 pints of punch. Guests drink $10\frac{1}{4}$ pints. Then the host adds another $7\frac{1}{2}$ pints to the bowl. How much punch is in the bowl now?

Answer: _____

Why is the answer reasonable?

_____

_____

1-12 Name _____ Date _____

Remembering

Tell whether the answer is reasonable or unreasonable. Explain how you decided.

1. $\frac{8}{9} + \frac{1}{10} = \frac{39}{90}$

_____

_____

2. $5\frac{1}{6} - 4\frac{2}{7} = 2\frac{37}{42}$

_____

_____

3. $\frac{11}{12} - \frac{7}{8} = \frac{1}{24}$

_____

_____

4. $5\frac{5}{6} + 1\frac{3}{4} = 5\frac{1}{12}$

_____

_____

Add or subtract.

5. $\frac{7}{8} + \frac{5}{8} =$ _____

6. $\frac{4}{7} + \frac{2}{3} =$ _____

7. $\frac{7}{15} - \frac{3}{10} =$ _____

8. $\frac{3}{4} - \frac{5}{12} =$ _____

9. $5\frac{4}{5} - 2\frac{1}{3} =$ _____

10. $7\frac{5}{6} + 2\frac{11}{12} =$ _____

Compare.

11. $\frac{5}{8} \bigcirc \frac{5}{9}$

12. $1\frac{7}{12} \bigcirc 1\frac{2}{3}$

13. $\frac{5}{9} \bigcirc \frac{3}{7}$

14. $\frac{1}{89} \bigcirc \frac{1}{90}$

15. $\frac{5}{18} \bigcirc \frac{2}{9}$

16. $\frac{65}{66} \bigcirc \frac{55}{56}$

Solve.

17. Stretch Your Thinking Find two mixed numbers such that when you estimate their sum by rounding to the nearest whole number you get a *different* estimate than when you round to the nearest half. Demonstrate that your numbers satisfy this condition.

_____

_____

_____

_____

Name Date

In the space below, design and sketch a bird hotel. Assume your design will be made from wood, and includes these characteristics.

- Walls not exposed to weathering are $\frac{1}{4}$-inch thick.
- Walls exposed to weathering are $\frac{1}{2}$-inch thick.
- The rooms are identical.

State the number of birds your design will accommodate, and the dimensions of one room. Then use the dimensions to compute the overall length, width, and height of your hotel.

1-13 Name _____ Date _____

Remembering

Add or subtract. Give your answer in simplest form.

1. $7\frac{1}{4} - 4\frac{5}{6}$

2. $1\frac{9}{10} + 1\frac{9}{10}$

3. $4 - 1\frac{6}{7}$

4. $\frac{7}{10} + 1\frac{11}{12}$

5. $4\frac{4}{5} - 1\frac{7}{8}$

6. $3\frac{5}{12} + 1\frac{2}{3}$

Compare.

7. $\frac{1}{57} \bigcirc \frac{1}{47}$

8. $\frac{5}{7} \bigcirc \frac{4}{5}$

9. $\frac{14}{15} \bigcirc \frac{15}{16}$

10. $\frac{5}{6} \bigcirc \frac{2}{3}$

11. $15\frac{3}{8} \bigcirc 15\frac{7}{10}$

12. $14\frac{1}{10} \bigcirc 13\frac{9}{10}$

Solve. *Show your work.*

13. Blake watched $\frac{1}{6}$ of a movie on Friday, $\frac{3}{5}$ of the movie on Saturday, and the rest on Sunday. What fraction of the movie did he watch on Sunday?

_____

14. Stretch Your Thinking Marshall surveyed his classmates and found that $\frac{5}{7}$ have a sister, $\frac{1}{2}$ have a brother, and $\frac{3}{14}$ don't have any siblings.

a. What is the sum of the three fractions?

_____

b. Why does it make sense for the sum to be greater than 1 whole?

_____

_____

2-1 Homework

Name _____ Date _____

The following shows how place value and money are related.

ones (dollars)	.	tenths (dimes)	hundredths (pennies)	thousandths (tenths of a penny)

Write each fraction as a decimal and then say it.

1. $\frac{349}{1,000}$ _____
2. $\frac{6}{10}$ _____
3. $\frac{58}{100}$ _____
4. $\frac{27}{1,000}$ _____
5. $\frac{2}{10}$ _____
6. $\frac{9}{100}$ _____
7. $\frac{6}{1,000}$ _____
8. $\frac{71}{100}$ _____
9. $\frac{90}{100}$ _____
10. $\frac{843}{1,000}$ _____
11. $\frac{5}{10}$ _____
12. $\frac{4}{100}$ _____
13. $\frac{1}{1,000}$ _____
14. $\frac{45}{100}$ _____
15. $\frac{896}{1,000}$ _____
16. $\frac{58}{1,000}$ _____

Solve.

17. A large building has 1,000 windows, and 5 of the windows need to be replaced. What decimal represents the number of windows that need to be replaced?

_____

18. At a reception, 23 of 100 pieces of wedding cake have been eaten. What decimal number represents the number of pieces of cake that have been eaten?

_____

19. Jody made 10 party invitations. Yesterday she mailed 4 of them. What decimal represents the number of invitations that have been mailed?

_____

20. There are 1,000 vehicles in a stadium parking lot; 422 of the vehicles are trucks. What decimal represents the number of vehicles that are trucks?

_____

21. Mr. Chan handed out eight tenths of his flyers. Write a fraction and a decimal that represents the amount of the flyers that he handed out.

_____

22. Jason has an album that holds 100 trading cards. He has 52 trading cards in the album. Write a fraction and a decimal that represent the amount of the album that is filled.

_____

2-1 Name Date

Remembering

Add.

1. $\frac{1}{3} + \frac{1}{7}$
2. $\frac{1}{5} + \frac{8}{15}$
3. $\frac{3}{8} + \frac{1}{4}$

Subtract.

4. $\frac{4}{5} - \frac{1}{8}$
5. $\frac{5}{6} - \frac{5}{9}$
6. $\frac{3}{5} - \frac{1}{12}$

Add or Subtract.

7. $5 - 3\frac{5}{8}$
8. $8\frac{1}{5} + 5\frac{4}{7}$
9. $11\frac{2}{5} - 6\frac{3}{20}$

Solve. *Show your work.*

10. Kennedy served $15\frac{3}{4}$ hours of volunteer service last month. She served $21\frac{5}{6}$ hours of volunteer service this month. How many more hours did she serve this month?

_____

11. **Stretch Your Thinking** Draw a diagram that shows 0.5 and $\frac{1}{2}$ are equivalent.

2-2 **Homework**

Name _____ Date _____

Write a decimal number for each word name.

1. nine thousand, six hundred five and nine tenths

_____

2. two hundred ten thousand, fifty and nineteen hundredths

_____

3. three tenths

_____

4. seven thousandths

_____

5. eight hundredths

_____

Write each amount as a decimal number.

6. $\frac{602}{1,000}$ _____ **7.** $\frac{21}{100}$ _____ **8.** $4\frac{9}{10}$ _____ **9.** $14\frac{27}{100}$ _____

10. $35\frac{712}{1,000}$ _____ **11.** $9\frac{5}{100}$ _____ **12.** $24\frac{13}{1,000}$ _____ **13.** $3\frac{68}{100}$ _____

14. $2\frac{1}{1,000}$ _____ **15.** $63\frac{7}{10}$ _____ **16.** $\frac{84}{1,000}$ _____ **17.** $29\frac{4}{1,000}$ _____

18. $8\frac{17}{1,000}$ _____ **19.** $\frac{6}{100}$ _____ **20.** $5\frac{106}{1,000}$ _____ **21.** $37\frac{3}{100}$ _____

Circle the value that is not equivalent to the other values.

22. 2.6	2.60	2.06	2.600	**23.** 4.07	4.070	4.70	4.0700
24. 65.800	65.8	65.08	65.80	**25.** 37.6	37.060	37.0600	37.06

26. Write three decimals that are equivalent.

_____

27. Write the decimals in Exercise 26 as fractions.

_____

2-2 Name _____ Date _____

Remembering

Add or Subtract.

1. $8\frac{1}{6} - 3\frac{3}{8}$

2. $6\frac{3}{4} + 2\frac{4}{5}$

3. $9\frac{2}{3} + 5\frac{7}{10}$

Solve. *Show your work.*

4. Tanner earns 5 credits while playing on a math review website. He uses $2\frac{4}{15}$ credits while reviewing fractions. How many credits does he have left?

_____

Estimate the sum or difference by rounding each mixed number to the nearest whole number. Then find the actual sum or difference.

5. $15\frac{5}{6} - 2\frac{1}{5}$

Estimate: _____

Difference: _____

6. $8\frac{3}{5} + 3\frac{1}{2}$

Estimate: _____

Sum: _____

Write each fraction as a decimal and then say it.

7. $\frac{44}{100}$ _____

8. $\frac{13}{1{,}000}$ _____

9. $\frac{3}{10}$ _____

10. $\frac{541}{1{,}000}$ _____

11. Stretch Your Thinking Draw two number lines that show 0.20 and $\frac{1}{5}$ are equivalent.

2-3 **Homework**

Name _____ Date _____

Write each amount as a decimal number.

1. 9 tenths _____ **2.** 52 thousandths _____ **3.** 8 hundredths _____

4. 3 cents _____ **5.** $\frac{65}{100}$ _____ **6.** $\frac{548}{1{,}000}$ _____

7. $\frac{12}{1{,}000}$ _____ **8.** $\frac{7}{100}$ _____ **9.** 4 thousandths _____

Circle the value that is *not* equivalent to the other values.

10. 0.47	0.470	0.407	0.4700	**11.** 0.5	0.50	$\frac{5}{10}$	0.05
12. 0.801	0.810	0.81	0.8100	**13.** 0.700	0.70	0.07	0.7
14. 0.39	0.390	$\frac{39}{100}$	$\frac{39}{1{,}000}$	**15.** 0.04	0.40	0.040	0.0400

Compare. Write > (greater than) or < (less than).

16. 0.36 ◯ 0.8 **17.** 0.405 ◯ 0.62 **18.** 0.91 ◯ 0.95

19. 0.45 ◯ 0.4 **20.** 0.836 ◯ 0.83 **21.** 0.299 ◯ 0.3

22. 0.621 ◯ 0.612 **23.** 0.7 ◯ 0.07 **24.** 0.504 ◯ 0.54

A store had the same amount of five fabrics. The chart shows the how much of each fabric is left. Use the data to answer each question.

Red fabric	0.510 yd
Blue fabric	0.492 yd
Yellow fabric	0.6 yd
White fabric	0.51 yd
Black fabric	0.48 yd

25. The store sold the most of which fabric? Explain.

_____

26. The store sold the least of which fabric? Explain.

_____

27. The same amount of which fabrics is left? Explain.

_____

2-3 Name _____ Date _____

Remembering

Estimate the sum or difference by rounding each mixed number to the nearest whole number. Then find the actual sum or difference.

1. $3\frac{7}{8} + 4\frac{2}{3}$

Estimate: _____

Sum: _____

2. $7\frac{5}{8} - 1\frac{1}{2}$

Estimate: _____

Difference: _____

Solve. Explain how you know your answer is reasonable.

Show your work.

3. Eli practices for a piano recital $3\frac{3}{4}$ hours in one week. In the same week, he practices basketball $1\frac{2}{3}$ hours. How much longer does he practice for his piano recital?

Answer: _____

Why is the answer reasonable?

_____

_____

Write a decimal number for each word name.

4. six hundred two and six tenths

_____

5. five thousandths

_____

6. Stretch Your Thinking Draw two number lines that show 0.200 and $\frac{1}{5}$ are equivalent.

2-4

Homework

Name _____ Date _____

The chart at the right shows the time each member of a relay team ran during a race. Use the data to answer each question.

Jack	47.51 sec
Dusty	47.49 sec
Brandon	47.6 sec
Raj	47.57 sec

1. How much longer did Jack run than Dusty?

_____

2. How much time did it take Brandon and Raj to complete their two legs of the race combined?

_____

3. Which two runners had the greatest difference in their running times? What is the difference?

_____

Copy each exercise. Then add or subtract.

4. $0.9 + 0.06 =$ _____

5. $0.47 + 0.25 =$ _____

6. $0.56 + 0.91 =$ _____

7. $1.4 - 0.9 =$ _____

8. $5 - 1.5 =$ _____

9. $3.7 - 2.49 =$ _____

10. $0.08 + 0.6 =$ _____

11. $0.48 + 0.39 =$ _____

12. $19 + 1.04 =$ _____

13. $3 - 0.05 =$ _____

14. $4.09 - 0.2 =$ _____

15. $6.07 - 4 =$ _____

2-4 Name _____ Date _____

Remembering

Use benchmarks of 0, $\frac{1}{2}$, and 1 to estimate the sum or difference. Then find the actual sum or difference.

1. $\frac{7}{12} + \frac{5}{6}$

Estimate: _____

Sum: _____

2. $\frac{4}{9} - \frac{7}{18}$

Estimate: _____

Difference: _____

Solve. Explain how you know your answer is reasonable.

Show your work.

3. Jordan is making a beaded necklace. Two thirds of the beads she uses are red and $\frac{4}{21}$ of the beads are blue. She wants the rest to be white. What fraction of the beads should be white?

Answer: _____

Why is the answer reasonable?

_____

_____

_____

Compare. Write $>$ (greater than) or $<$ (less than).

4. 0.2 ◯ 0.19

5. 0.564 ◯ 0.602

6. 0.08 ◯ 0.8

7. Stretch Your Thinking Draw a diagram that shows $0.27 + 0.23 = \frac{1}{2}$.

2-5 **Homework**

Name _____ Date _____

Use the number 724,062.58 for each exercise.

1. Increase the number by 0.07. _____

2. Decrease the number by 100,000. _____

3. Add 8 in the hundreds place. _____

4. Subtract 2 from the hundredths place. _____

Copy each exercise. Then add or subtract.

5. \$37 + 45¢ = _____ **6.** \$82.06 + 25¢ = _____ **7.** 59¢ + \$4.23 = _____

8. 9 m + 0.05 m = _____ **9.** 92.24 + 3.6 = _____ **10.** 5 m + 0.08 m = _____

11. 231 + 0.26 = _____ **12.** 46.08 + 0.97 = _____ **13.** 6.4 m + 0.07 m = _____

Solve. *Show your work.*

14. Lina is making curtains and a decorative pillow for her bedroom. She needs 0.75 meter of cloth for the pillow and 4.67 meters for the curtains. How much cloth does she need in all?

_____

15. Olivia is buying a jacket that costs \$85.99. The sales tax that will be added to the cost of the jacket is \$5.16. What is the total cost of the jacket including sales tax?

_____

2-5 Name _____ Date _____

Remembering

Compare. Write > (greater than) or < (less than).

1. $\frac{3}{7}$ ◯ $\frac{3}{8}$

2. $\frac{1}{8}$ ◯ $\frac{1}{6}$

3. $\frac{9}{11}$ ◯ $\frac{7}{11}$

4. $\frac{4}{8}$ ◯ $\frac{5}{6}$

5. $\frac{5}{6}$ ◯ $\frac{3}{4}$

6. $\frac{7}{12}$ ◯ $\frac{6}{7}$

Compare. Write > (greater than) or < (less than).

7. 0.17 ◯ 0.28

8. 0.275 ◯ 0.109

9. 0.29 ◯ 0.3

10. 0.61 ◯ 0.58

11. 0.81 ◯ 0.79

12. 0.05 ◯ 0.5

Add or subtract.

13.
$$\begin{array}{r} 0.8 \\ +\ 0.07 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 0.22 \\ +\ 0.49 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 2.6 \\ -\ 0.7 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 5.6 \\ -\ 4.87 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 7 \\ -\ 3.8 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 0.96 \\ +\ 0.17 \\ \hline \end{array}$$

19. Stretch Your Thinking Write 4 different mixed decimals that equal 11 wholes. Draw a picture that shows you are correct.

_____

2-6

Homework

Name _____ **Date** _____

Copy each exercise. Then subtract.

1. 6,000 − 348 = _____

2. 7,364 − 937 = _____

3. 50,821 − 3,617 = _____

4. 720.95 − 286.4 = _____

5. 18,652 − 4.31 = _____

6. 350.6 − 176.54 = _____

Solve.

Show your work.

7. Ahmad had a piece of rope that was 7.14 meters long. He cut off 0.09 meter to practice making knots. What was the length of the rope after the cut?

_____

8. Natasha has a large collection of books. The thickest book measures 4.9 centimeters. The thinnest book measures 1.8 centimeters. What is the difference in thicknesses of those two books?

_____

9. Yoshi saved $1,238.46 for a vacation in Mexico. While in Mexico, she spent $975. What amount of money did Yoshi not spend?

_____

10. Tarantulas are one of the largest spiders on Earth. A tarantula can grow to be about 6.8 centimeters long. A spitting spider can grow to be about 0.9 centimeters long. About how much longer are the largest tarantulas than the largest spitting spiders?

_____

Name _____ Date _____

Remembering

Write the mixed number as a fraction.

1. $1\frac{3}{5} =$ _____

2. $3\frac{1}{8} =$ _____

3. $2\frac{2}{3} =$ _____

4. $4\frac{4}{7} =$ _____

5. $1\frac{1}{3} =$ _____

6. $3\frac{5}{6} =$ _____

Add or subtract.

7.
$$\begin{array}{r} 6 \\ -\ 4.1 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 0.32 \\ +\ 0.92 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 4.5 \\ -\ 3.77 \\ \hline \end{array}$$

10. 44¢ + $4.87 = _____

11. 32¢ + 66¢ = _____

12. 0.43 m + 0.77 m = _____

Solve.

Show your work.

13. When Erin got her puppy, Cuddles, he weighed 788.52 grams. He now weighs 2,313.6 grams more than he did when Erin first brought him home. How much does Cuddles weigh now?

_____

14. Stretch Your Thinking Write a subtraction equation with a difference of 54.57. Then draw a number line to show between which two whole numbers the difference lies.

_____

2-7 **Homework**

Name _____ Date _____

Use what you know about the Commutative Property to solve for *n*.

1. $26{,}184 + 1{,}546 = 1{,}546 + n$

$n =$ _____

2. $17.39 + 12.58 = 12.58 + n$

$n =$ _____

Regroup the numbers using the Associative Property. Then add.

3. $(\frac{7}{10} + \frac{3}{4}) + \frac{1}{4} =$

_____

4. $1.02 + (0.98 + 4.87) =$

_____

5. $2\frac{5}{8} + (\frac{3}{8} + \frac{2}{3}) =$

_____

Use the Distributive Property to rewrite the problem so it has only two factors. Then solve.

6. $(25 \times 9) + (75 \times 9) =$

_____

Group the numbers to make the addition easier. Then add.

7.
20,000
70,000
30,000
68,000
+ 80,000

8.
10.75
10.4
10.25
10.57
+ 10.6

9.
1.600
1.200
1.200
+ 1.479

10.
$1\frac{7}{11}$
$5\frac{5}{6}$
$\frac{3}{11}$
$2\frac{1}{6}$
+ $\frac{1}{11}$

11. On Monday, Mr. Borden ran 4.6 miles in the morning and 0.78 miles that afternoon. On Tuesday, he ran 3.4 miles. How much did he run on Monday and Tuesday all together. Write an equation and solve.

_____

2-7 Name _____ Date _____

Remembering

Solve. *Show your work.*

1. Trent is making a week's worth of after-school snacks for himself and his sister. He uses $1\frac{1}{5}$ cups of mixed nuts and $2\frac{3}{4}$ cups of granola. How many cups did he use in all?

_____

2. Shannon walked $4\frac{7}{8}$ miles and ran $3\frac{1}{2}$ miles during the week. How much further did she walk than run?

_____

Add.

3. $\$54.25 + 55¢ =$ _____ **4.** $68¢ + 21¢ =$ _____ **5.** $92¢ + \$2.39 =$ _____

6. 0.06 m + 0.9 m

7. 0.44 m + 0.15 m

8. 5.6 m + 0.7 m

Subtract.

9. 70,763 − 2,176

10. 6,982 − 455

11. 5,000 − 452

12. 46,872 − 8.28

13. 561.5 − 478.49

14. 676.54 − 196.9

15. Stretch Your Thinking Use decimals and fractions in the same equation showing the Commutative Property. Repeat for the Associative Property.

_____

_____

2-8 **Homework**

Name _____ Date _____

Round to the nearest whole number.

1. 8.36 _____ **2.** 18.7 _____ **3.** 9.831 _____

Round to the nearest tenth.

4. 24.316 _____ **5.** 5.28 _____ **6.** 23.017 _____

Round to the nearest hundredth.

7. 58.635 _____ **8.** 7.214 _____ **9.** 210.097 _____

Estimate each sum or difference.

10. \$46.78 − \$18.55 _____ **11.** 12.3 + 4.7 _____ **12.** 9.586 + 3.097 _____

Solve. *Show your work.*

13. A decimal number changed to 23.7 after it was rounded. Give a decimal number that is less than 23.7 and another that is greater than 23.7 that each round to 23.7. Explain to what place each number was rounded.

_____

_____

14. When Marla rounded 19.95 to the nearest tenth, she found the number changed to 20. Is this correct? Explain.

_____

15. Peter decided that the total cost for a \$24.55 pair of jeans and a \$12.25 shirt was \$26.80. Was Peter's answer reasonable? Explain why or why not.

_____

16. Biruk wants to buy a book for \$15.25 and a book for \$4.85. He wants to pay with one \$20 bill. Use estimation to decide if this is reasonable. Explain to what place value to round for an estimate that is useful in this situation.

_____

2-8 Name _____ Date _____

Remembering

Solve. *Show your work.*

1. Matt pours $3\frac{2}{3}$ cups of orange juice into a measuring cup from a large container. Then he pours $1\frac{1}{4}$ cups back into the container. How much orange juice remains in the measuring cup?

_____

2. The school cafeteria manager orders $7\frac{3}{8}$ pounds of red onions and $10\frac{1}{2}$ pounds of yellow onions. How many pounds of onions did the manager order in all?

_____

Subtract.

3. 21,445
− 3,548

4. 980.3
− 525.35

5. 774.12
−248.8

Use the Distributive Property to rewrite each problem so it has only two factors. Then solve.

6. $(5 \times 600) + (5 \times 400) =$ _____

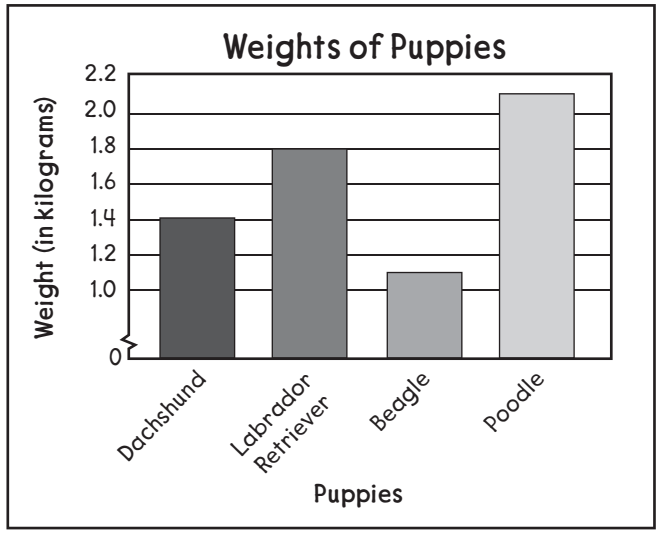
7. $(15 \times 6) + (85 \times 6) =$ _____

8. Stretch Your Thinking Name three decimals between 16.4 and 16.5. Draw a number line estimating the placement of all five decimals.

_____

Name _____ Date _____

Jamal made a bar graph to compare the weights of 4 puppies in the animal shelter.



1. How much did the poodle weigh?

_____

2. List the puppies in order from heaviest to lightest.

_____

3. What is the combined weights of the Labrador retriever and the beagle?

_____

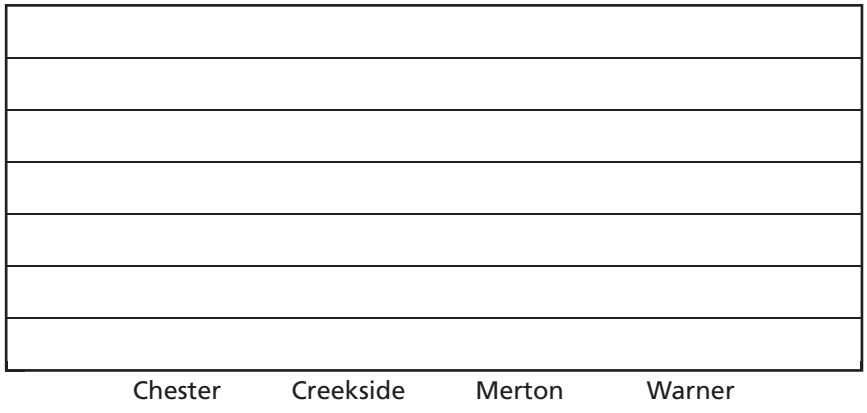
4. How much more did the Labrador retriever weigh than the dachshund?

_____

The table shows the amount of rainfall this month in 4 different cities.

City	Rainfall Amounts
Chester	0.20 cm
Creekside	0.10 cm
Merton	0.05 cm
Warner	0.25 cm

5. Make a bar graph showing this information. Remember to give your graph a title, labels, and a scale.



Name _____ Date _____

Remembering

Multiply.

1. $45 \cdot 3 =$ _____ **2.** $431 \cdot 6 =$ _____ **3.** $17 \cdot 32 =$ _____

4. $34 \cdot 67 =$ _____ **5.** $1{,}509 \cdot 3 =$ _____ **6.** $5{,}098 \cdot 7 =$ _____

Regroup the numbers using the Associative Property. Then add.

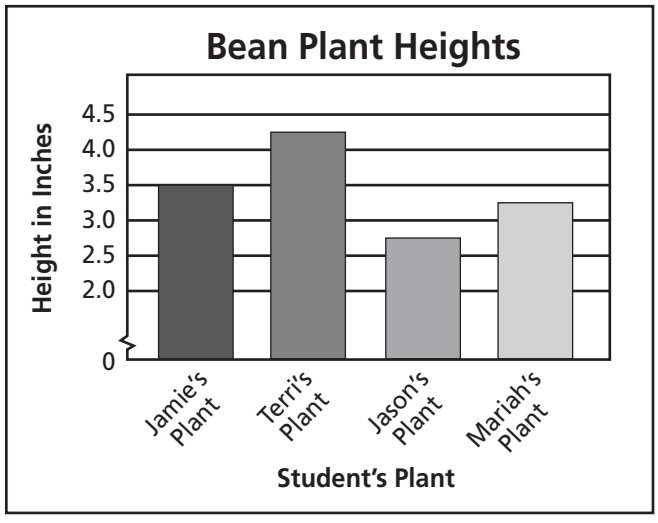
7. $3.6 + (0.4 + 0.25) =$ _____

8. $2\frac{6}{10} + (\frac{4}{10} + \frac{4}{5}) =$ _____

Estimate each sum or difference.

9. $7.535 + 2.706$ **10.** $\$27.89 - \$12.64$ **11.** $11.1 + 9.9$

12. Stretch Your Thinking The bar graph shows the heights of bean plants for four students in Mrs. Jarnigan's fourth-grade science class.



Write a two-step problem using the data from the graph.

_____

_____

_____

_____

2-10

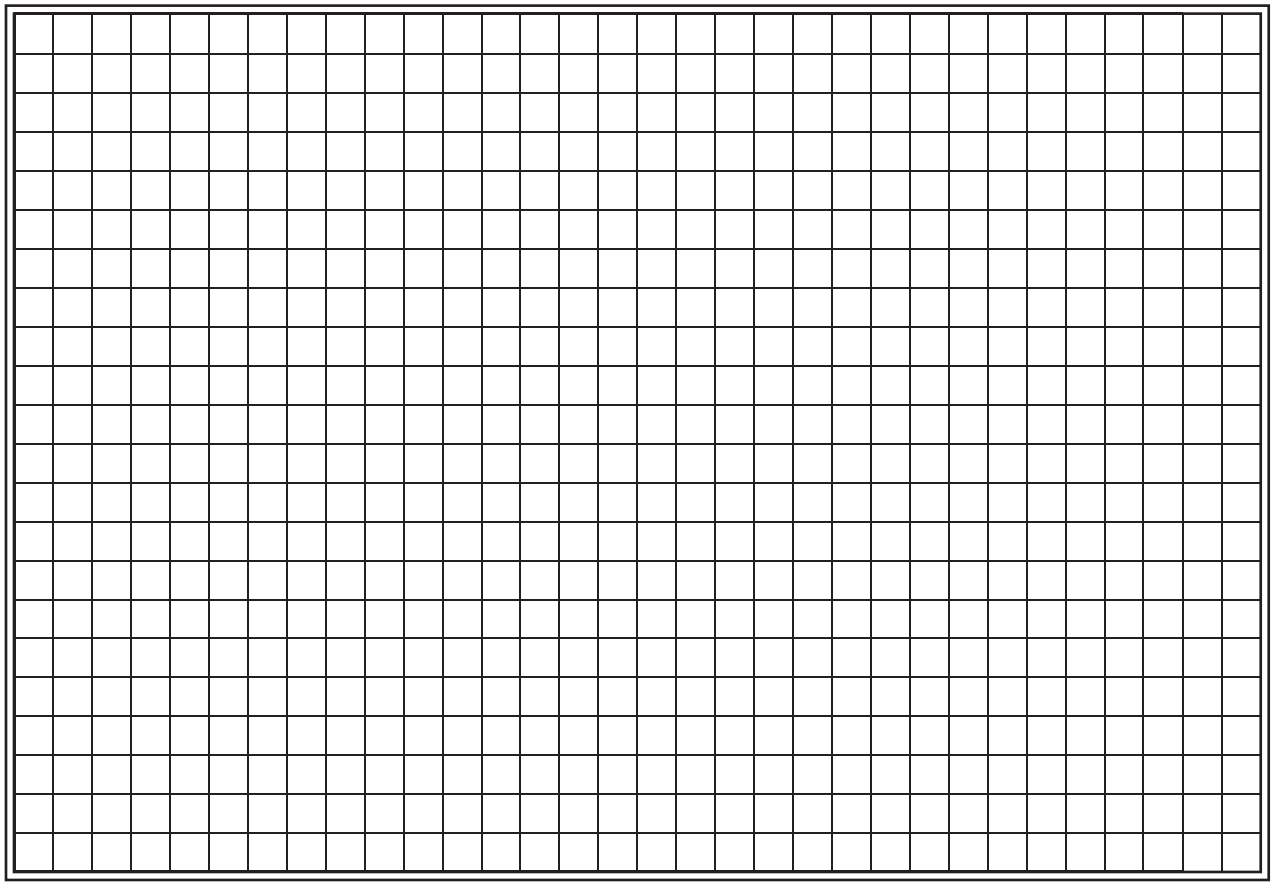
Homework

Name **Date**

Look again at the table on Student Book page 54. It shows how far from the sun the planets in our solar system orbit. For example, it shows that Jupiter (5.2 AU) orbits *about* 5 times farther from the sun than Earth (1 AU) because $1 \times 5 = 5$.

On a grid where 1 grid square = 1 AU, a dot for Earth would be 1 grid square away from the sun, and a dot for Jupiter would be about 5 grid squares away.

On the left side of the grid below, draw a dot to represent the sun. Then using the scale 1 grid square = 1 AU, draw and label a dot for each of the eight planets to show their relative distances from the sun.



2-10 Name _____ Date _____

Remembering

Solve. *Show your work.*

1. During a movie, Kelley eats $12\frac{2}{7}$ ounces of snack mix and Madison eats $15\frac{3}{4}$ ounces of snack mix. How much did they eat altogether?

_____

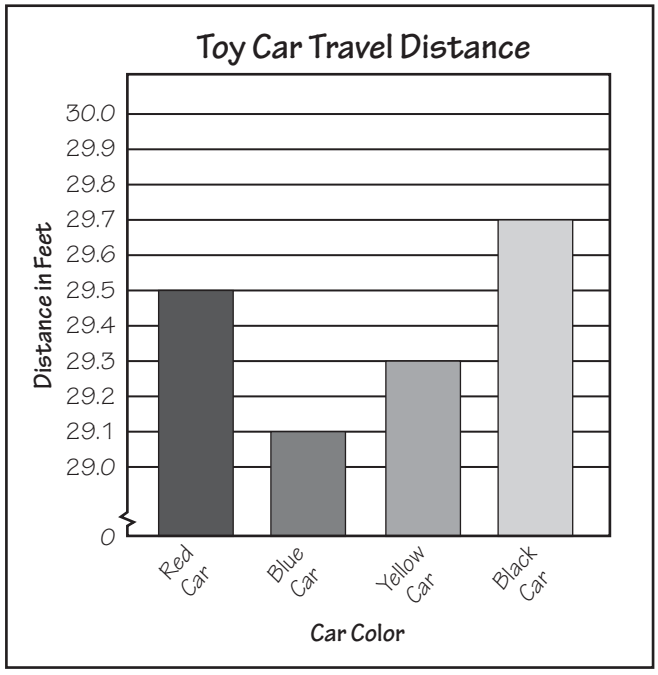
2. Caleb practices the piano for $15\frac{2}{3}$ minutes on Monday and $21\frac{1}{2}$ minutes on Tuesday. How much longer did he practice on Tuesday?

_____

Estimate each sum or difference.

3. $13.2 + 52.7$ **4.** $19.454 + 1.897$ **5.** $\$33.03 - \$10.78$

Carly made a bar graph to show how far each of her toy cars traveled.



6. How much farther did Carly's yellow car travel than her blue car?

_____

7. What is the greatest and least distance traveled? What is the difference between the two distances?

_____

8. Stretch Your Thinking Brad has 32 ounces of mixed fruit to share with three friends. He gives 7.65 ounces to Carrie, 8.02 ounces to Joshua, and 6.88 ounces to Terrell. How much mixed fruit is left for Brad?

_____

3-1 **Homework**

Name _____ Date _____

Solve. Write a multiplication equation for each problem.

Miguel swam 6 lengths of the pool. Po Lan swam 3 times as far as Miguel. Lionel swam $\frac{1}{3}$ as far as Miguel.

1. How many lengths did Po Lan swim? _____

Write the equation. _____

2. How many lengths did Lionel swim? _____

Write the equation. _____

Chris cut a length of rope that was 12 feet long. Dayna cut a rope 4 times as long as Chris's rope. Benita cut a rope $\frac{1}{4}$ as long as Chris's rope.

3. How long is Dayna's rope? _____

Write the equation. _____

4. How long is Benita's rope? _____

Write the equation. _____

Write two statements for each pair of treats. Use the word *times*.

5. Compare cookies and drinks.

_____

_____

6. Compare drinks and pizzas.

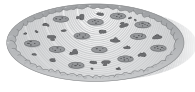
_____

_____

7. Compare cookies and pizzas.

_____

_____

Treat	Number
	24
	8
	2

Solve.

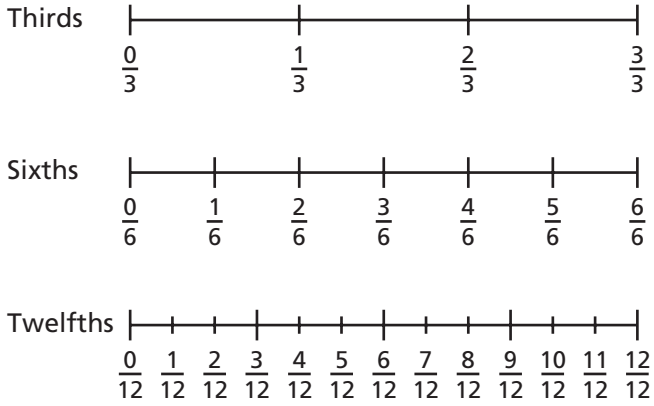
8. $\frac{1}{3} \cdot 18 =$ _____ **9.** $\frac{1}{4}$ of 12 = _____ **10.** $\frac{1}{8} \cdot 32 =$ _____

11. $\frac{1}{9}$ of 27 = _____ **12.** $\frac{1}{8} \cdot 56 =$ _____ **13.** $\frac{1}{3}$ of 15 = _____

3-1 Name _____ Date _____

Remembering

Use the number lines to complete Exercises 1–3.



1. If you run $\frac{2}{3}$ mile, how many sixths have you run?

_____

2. If you measure $\frac{5}{6}$ meter, how many twelfths have you measured?

_____

3. If you have $\frac{8}{12}$ of a pizza, how many thirds do you have?

_____

Write each fraction as a decimal.

4. $\frac{76}{1{,}000} =$ _____ **5.** $\frac{7}{10} =$ _____ **6.** $\frac{49}{100} =$ _____ **7.** $\frac{32}{1{,}000} =$ _____

Add or subtract.

8. $0.28 + 0.43 =$ _____ **9.** $0.7 + 0.04 =$ _____ **10.** $7.8 - 1.95 =$ _____

11. Stretch Your Thinking Draw a diagram that shows $\frac{1}{5}$ times 30 equals 6.

3-2

Homework

Name _____ **Date** _____

Multiply.

1. $\frac{2}{3} \cdot 15 =$ _____

2. $\frac{3}{4} \cdot 8 =$ _____

3. $\frac{7}{8} \cdot 32 =$ _____

4. $\frac{2}{9} \cdot 27 =$ _____

5. $\frac{3}{8} \cdot 56 =$ _____

6. $\frac{3}{4} \cdot 16 =$ _____

7. $\frac{2}{3} \cdot 21 =$ _____

8. $\frac{4}{5} \cdot 35 =$ _____

9. $\frac{5}{7} \cdot 28 =$ _____

10. $\frac{4}{9} \cdot 45 =$ _____

11. $\frac{5}{12} \cdot 24 =$ _____

12. $\frac{9}{10} \cdot 70 =$ _____

13. $\frac{7}{9} \cdot 18 =$ _____

14. $\frac{5}{8} \cdot 80 =$ _____

15. $\frac{4}{15} \cdot 45 =$ _____

Solve. *Show your work.*

16. Rebecca has 21 math problems to solve. She has solved $\frac{2}{7}$ of them. How many problems has she solved?

_____

17. Tessa shot 36 free throws. She made 27 of them. What fraction of her free throws did Tessa make?

_____

18. A carousel has 56 horses. $\frac{3}{8}$ of them are white. How many horses are not white?

_____

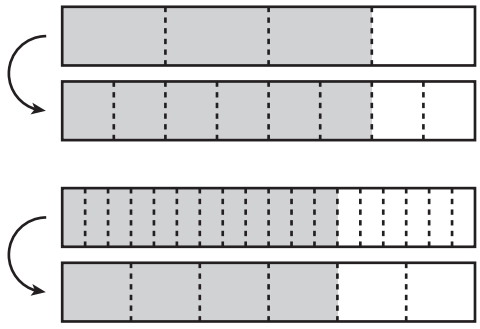
19. Nathan works at a hardware store. Today he sold 48 tools. $\frac{5}{6}$ of the tools he sold were hammers. How many hammers did Nathan sell today?

_____

3-2 Name _____ Date _____

Remembering

Complete each exercise about the pairs of fraction bars.



1. What equivalent fractions are shown? _____
2. Identify the multiplier. _____
3. What equivalent fractions are shown? _____
4. Identify the divisor. _____

Write each amount as a decimal number.

5. $\frac{84}{1{,}000}$ _____
6. $\frac{31564}{1{,}000}$ _____
7. $\frac{1176}{100}$ _____
8. $\frac{876}{1{,}000}$ _____

Solve. Write a multiplication equation for each problem.

Jonas has 8 sponsors for the school walk-a-thon.
Maura has 3 times as many sponsors as Jonas.
Trenton has $\frac{1}{4}$ as many sponsors as Jonas.

9. How many sponsors does Maura have? _____

   Write the equation. _____

10. How many sponsors does Trenton have? _____

    Write the equation. _____

11. **Stretch Your Thinking** Hannah and Jo are driving separately to a restaurant that is 60 miles away from their town. Hannah drives $\frac{3}{5}$ of the distance and Jo drives $\frac{5}{6}$ of the distance before stopping for gasoline. Who has driven farther? How many more miles does each driver need to drive to reach the restaurant?

_____

_____

_____

_____

3-3

Homework

Name _____ Date _____

The campers in each cabin at Bear Claw Camp held a contest to see who could walk the farthest in one day. Use the sign to answer the questions. Write your answers as fractions.

1. The campers in Cabin A walked $\frac{1}{4}$ of the way to Otter Ridge. How many miles did they walk?

_____

2. The campers in Cabin B walked $\frac{2}{3}$ of the way to Silver Stream. How many miles did they walk?

_____

3. The campers in Cabin C walked $\frac{3}{5}$ of the way to Fossil Cave. How many miles did they walk?

_____

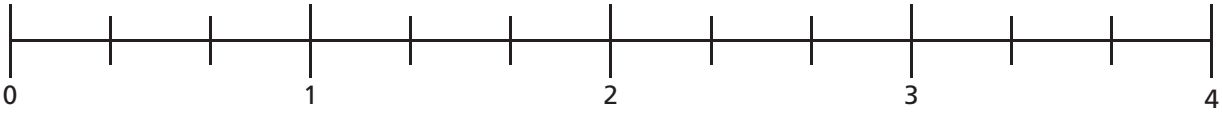
4. The campers in Cabin D walked $\frac{1}{6}$ of the way to Mammoth Mountain. How many miles did they walk?

_____

5. Which group of campers walked the farthest that day?

_____

6. Show $\frac{2}{3}$ of 4 on the number line.



7. Write $\frac{2}{3}$ of 4 as a fraction. _____

8. Write $\frac{2}{3}$ of 4 as a mixed number. _____

Multiply. Write your answers as fractions.

9. $\frac{2}{7} \cdot 4 =$ _____ **10.** $\frac{2}{3} \cdot 8 =$ _____ **11.** $\frac{5}{6} \cdot 4 =$ _____

12. $\frac{2}{9} \cdot 20 =$ _____ **13.** $\frac{7}{9} \cdot 2 =$ _____ **14.** $\frac{3}{8} \cdot 5 =$ _____

15. $\frac{2}{3} \cdot 13 =$ _____ **16.** $\frac{5}{12} \cdot 18 =$ _____ **17.** $\frac{5}{9} \cdot 12 =$ _____

3-3 Name _____ Date _____

Remembering

Compare.

1. $\frac{5}{6}$ ◯ $\frac{5}{7}$

2. $\frac{1}{5}$ ◯ $\frac{1}{4}$

3. $\frac{8}{10}$ ◯ $\frac{6}{8}$

4. $\frac{6}{7}$ ◯ $\frac{7}{8}$

5. $\frac{2}{3}$ ◯ $\frac{3}{4}$

6. $\frac{8}{9}$ ◯ $\frac{6}{7}$

Compare.

7. 0.54 ◯ 0.65

8. 0.207 ◯ 0.342

9. 0.5 ◯ 0.47

10. 0.76 ◯ 0.67

11. 0.22 ◯ 0.41

12. 0.6 ◯ 0.06

Multiply.

13. $\frac{4}{5} \cdot 20 =$ _____

14. $\frac{2}{3} \cdot 21 =$ _____

15. $\frac{5}{8} \cdot 24 =$ _____

16. $\frac{1}{9} \cdot 36 =$ _____

17. $\frac{3}{4} \cdot 16 =$ _____

18. $\frac{2}{7} \cdot 14 =$ _____

19. $\frac{3}{12} \cdot 24 =$ _____

20. $\frac{8}{10} \cdot 80 =$ _____

21. $\frac{3}{9} \cdot 45 =$ _____

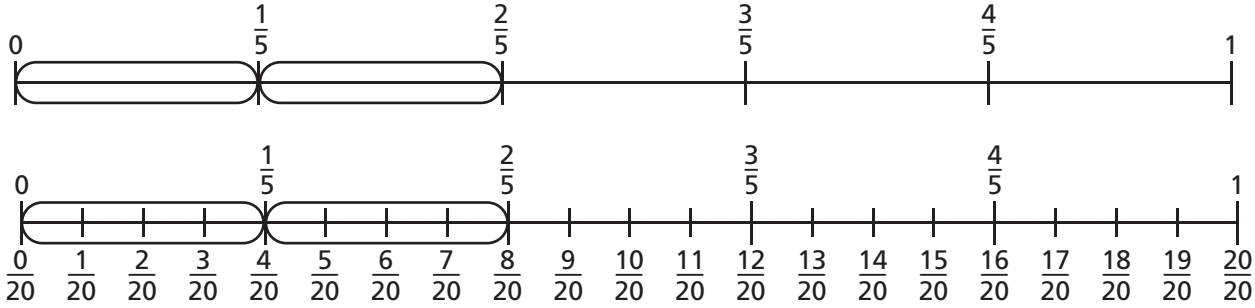
22. Stretch Your Thinking Write a multiplication equation using one whole number and one fraction that have a product of $\frac{18}{8}$.

_____

Homework

Name _____ Date _____

Tanith is using a number line to find $\frac{3}{4} \cdot \frac{2}{5}$. This is her work so far:

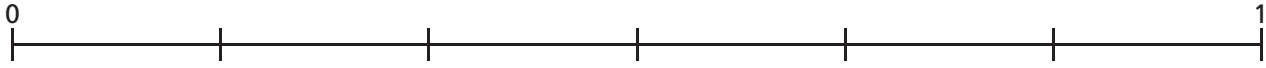


1. Explain Tanith's work so far to someone at home.

2. Finish Tanith's work by circling $\frac{3}{4}$ of each circled fifth. How many 20ths did you circle altogether? _____

What is $\frac{3}{4} \cdot \frac{2}{5}$? _____

3. Use the number line to find $\frac{2}{3} \cdot \frac{5}{6}$. Label all the parts above and below. _____



Solve. *Show your work.*

4. Four friends at a party popped $\frac{3}{4}$ of a bag of popcorn. They ate half of what was popped. What fraction of the popcorn in the bag did they eat? _____

5. Ashley brought $\frac{7}{8}$ gallon of lemonade to the party. Her friends drank $\frac{2}{3}$ of it. How many gallons of lemonade did they drink? _____

Multiply. You do not need to simplify.

6. $\frac{2}{7} \cdot \frac{1}{3} =$ _____

7. $\frac{4}{9} \cdot \frac{2}{9} =$ _____

8. $\frac{1}{8} \cdot \frac{5}{6} =$ _____

9. $\frac{2}{7} \cdot 12 =$ _____

10. $\frac{4}{5} \cdot \frac{2}{3} =$ _____

11. $\frac{1}{7} \cdot \frac{3}{5} =$ _____

12. $\frac{9}{10} \cdot \frac{1}{2} =$ _____

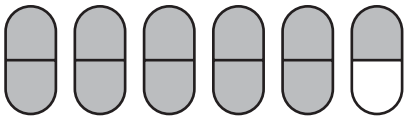
13. $\frac{5}{12} \cdot 3 =$ _____

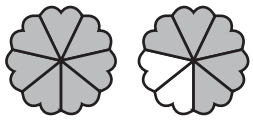
14. $\frac{5}{6} \cdot \frac{1}{6} =$ _____

3-4 Name _____ Date _____

Remembering

Name the mixed number shown by the shaded parts.



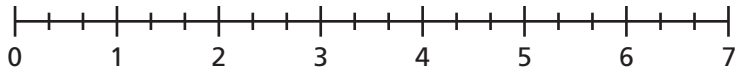


1. _____ **2.** _____ **3.** _____

Add.

4. 454 + 0.65 = _____ **5.** 80.55 + 0.91= _____ **6.** 31.78 m + 6.2 m = _____

7. Show $\frac{1}{3}$ of 7 on the number line.



8. Write $\frac{1}{3}$ of 7 as a fraction. _____

9. Write $\frac{1}{3}$ of 7 as a mixed number. _____

10. Stretch Your Thinking Solve for the unknown fraction. Then divide and shade an area model to show the equation. $\frac{2}{5} \cdot ? = \frac{10}{30}$.

_____

3-5 Homework

Name _____ Date _____

Multiply. Simplify first if you can.

1. $\frac{2}{5} \cdot \frac{6}{7} =$ _____

2. $\frac{4}{9} \cdot \frac{1}{8} =$ _____

3. $\frac{5}{24} \cdot \frac{8}{15} =$ _____

4. $\frac{2}{17} \cdot \frac{8}{1} =$ _____

5. $\frac{3}{4} \cdot \frac{12}{25} =$ _____

6. $\frac{5}{7} \cdot \frac{3}{8} =$ _____

7. $\frac{3}{10} \cdot \frac{2}{3} =$ _____

8. $\frac{5}{16} \cdot \frac{2}{25} =$ _____

9. $\frac{4}{35} \cdot \frac{7}{12} =$ _____

10. $\frac{5}{6} \cdot \frac{7}{1} =$ _____

11. $\frac{7}{9} \cdot \frac{6}{49} =$ _____

12. $\frac{7}{8} \cdot \frac{2}{3} =$ _____

13. Which fraction is not equivalent to the others?

$\frac{3}{15}$ $\frac{2}{10}$ $\frac{1}{5}$ $\frac{9}{45}$ $\frac{10}{50}$ $\frac{6}{40}$ $\frac{7}{35}$ $\frac{100}{500}$

Solve. *Show your work*

14. In the town zoo, $\frac{3}{28}$ of the animals are birds. Of the birds, $\frac{4}{15}$ are birds of prey. What fraction of the animals at the zoo are birds of prey?

_____

15. Tuesday at the zoo, $\frac{5}{12}$ of the visitors were adults. Of these adults, $\frac{3}{10}$ were men. What fraction of the people who visited the zoo on Tuesday were men?

_____

16. On Tuesday, $\frac{14}{25}$ of the souvenirs purchased at the zoo gift shop were stuffed animals. Of the stuffed animals purchased, $\frac{10}{21}$ were bears. What fraction of the souvenirs purchased at the zoo gift shop on Tuesday were stuffed bears?

_____

3-5 Name _____ Date _____

Remembering

Add or subtract.

1. $1\frac{4}{5} + 5\frac{2}{5}$

2. $5\frac{1}{6} + 3\frac{5}{6}$

3. $1\frac{2}{3} - \frac{1}{3}$

4. $\frac{3}{4} + \frac{5}{4}$

5. $7\frac{8}{9} - 3\frac{5}{9}$

6. $6 - 4\frac{1}{2}$

Subtract.

7. 31,763 − 6.51 = _____

8. 132.76 − 87.24 = _____

9. 968.29 − 217.5 = _____

10. Use the number line to find $\frac{3}{4} \cdot \frac{2}{5}$. Label all the parts above and below.

$\frac{3}{4} \cdot \frac{2}{5} =$ _____

11. Stretch Your Thinking Write a word problem that will use the equation $\frac{2}{6} \cdot \frac{8}{10} = x$ in order to solve. Then simplify and multiply to solve.

_____

_____

_____

_____

3-6

Homework

Name _____ Date _____

Find each product by first rewriting each mixed number as a fraction.

1. $\frac{3}{7} \cdot 2\frac{1}{2} =$ _____

2. $1\frac{7}{10} \cdot 5 =$ _____

3. $2\frac{2}{3} \cdot 4\frac{1}{5} =$ _____

4. $5\frac{1}{3} \cdot \frac{3}{8} =$ _____

5. $\frac{5}{9} \cdot 1\frac{2}{5} =$ _____

6. $12 \cdot 2\frac{3}{4} =$ _____

7. $3\frac{1}{2} \cdot 3\frac{1}{2} =$ _____

8. $\frac{1}{9} \cdot 3\frac{9}{10} =$ _____

Solve. *Show your work.*

9. The bottom of Zeyda's jewelry box is a rectangle with length $5\frac{3}{8}$ inches and width $3\frac{1}{4}$ inches. What is the area of the bottom of the jewelry box?

_____

10. The Patel family went apple picking. The number of red apples they picked was $2\frac{2}{9}$ times the number of green apples they picked. If they picked 45 green apples, how many red apples did they pick?

_____

11. The art museum is $8\frac{1}{2}$ miles from Alison's house. Alison has ridden her bike $\frac{2}{3}$ of the way there so far. How far has she gone?

_____

Name _____ Date _____

Remembering

Add.

1. $\frac{3}{8} + \frac{1}{6}$

2. $\frac{1}{5} + \frac{3}{4}$

3. $\frac{5}{6} + \frac{1}{8}$

4. $\frac{1}{3} + \frac{2}{7}$

5. $\frac{2}{3} + \frac{1}{9}$

6. $\frac{4}{5} + \frac{1}{10}$

Use the Commutative Property to solve for *n*.

7. $55{,}207 + 87{,}331 = 87{,}331 + n$

$n =$ _____

8. $48.76 + 20.08 = 20.08 + n$

$n =$ _____

Multiply. Simplify first if you can.

9. $\frac{2}{3} \cdot \frac{3}{4} =$ _____

10. $\frac{7}{10} \cdot \frac{6}{7} =$ _____

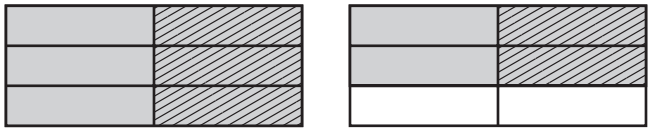
11. $\frac{3}{5} \cdot \frac{5}{6} =$ _____

12. $\frac{5}{6} \cdot \frac{12}{25} =$ _____

13. $\frac{1}{2} \cdot \frac{4}{7} =$ _____

14. $\frac{2}{9} \cdot \frac{3}{8} =$ _____

15. Stretch Your Thinking Complete the mixed number equation that is represented by the area model.



$\frac{1}{2} \cdot$ _____ $=$ _____

3-7 Homework

Name _____ Date _____

Solve.

1. $\frac{3}{4} \cdot \frac{1}{8}$

2. $\frac{2}{3} - \frac{1}{9}$

3. $\frac{1}{10} + \frac{1}{5}$

4. $\frac{2}{7} \cdot 12$

5. $\frac{1}{5} + \frac{2}{3}$

6. $\frac{1}{4} + \frac{3}{8}$

7. $\frac{5}{7} \cdot \frac{5}{6}$

8. $\frac{11}{12} + 3$

9. $\frac{4}{9} - \frac{2}{9}$

10. $\frac{1}{3} \cdot \frac{1}{8}$

11. $\frac{7}{8} \cdot \frac{3}{4}$

12. $10 - \frac{1}{9}$

Solve. *Show your work.*

13. Rodrigo's fish bowl holds $\frac{7}{8}$ gallon of water. It is now $\frac{1}{2}$ full. How much water is in it?

_____

14. Kenya jumped $7\frac{1}{6}$ feet. Janet jumped $6\frac{1}{3}$ feet. How much farther did Kenya jump?

_____

15. A group of hikers walked $8\frac{7}{10}$ miles to Caribou Cave and then $5\frac{1}{5}$ miles to Silver Stream. How far did they walk altogether?

_____

16. A recipe calls for $\frac{3}{4}$ cup of flour. Estevan wants to make $\frac{1}{3}$ of the recipe. How much flour will he need?

_____

17. A truck was carrying $2\frac{1}{8}$ tons of sand. When it arrived, only $1\frac{1}{2}$ tons of sand were left. How much sand was lost along the way?

_____

Name _____ Date _____

Remembering

Subtract.

1. $\frac{3}{4} - \frac{1}{6}$

2. $\frac{2}{9} - \frac{1}{10}$

3. $\frac{7}{8} - \frac{1}{4}$

4. $\frac{6}{7} - \frac{1}{3}$

5. $\frac{4}{5} - \frac{2}{3}$

6. $\frac{1}{2} - \frac{1}{8}$

Estimate each sum or difference.

7. 6.759 + 2.099 _____

8. \$44.25 − \$21.76 _____

9. 14.6 + 2.4 _____

Find each product by first rewriting each mixed number as a fraction.

10. $\frac{5}{8} \cdot 3\frac{1}{3} =$ _____

11. $4\frac{3}{5} \cdot 5 =$ _____

12. $1\frac{2}{5} \cdot 3\frac{4}{9} =$ _____

13. $6\frac{1}{5} \cdot \frac{5}{8} =$ _____

14. Stretch Your Thinking Give an example that shows how to use the Distributive Property to multiply a number by a sum. All of the numbers you use should be mixed numbers or fractions.

_____

_____

Name _____ Date _____

Complete each fraction box.

1.

$\frac{7}{8}$ and $\frac{3}{4}$	
>	$\frac{7}{8} > \frac{3}{4}$ or $\frac{7}{8} > \frac{6}{8}$
+	
−	
·	

2.

$\frac{1}{2}$ and $\frac{3}{5}$	
>	
+	
−	
·	

Solve. *Show your work.*

3. The Eagle Trucking Company must deliver $\frac{7}{8}$ ton of cement blocks and $\frac{5}{8}$ ton of bricks to one place. How much will this load weigh?

_____

4. A truck carried $3\frac{1}{3}$ tons of sand, but lost $\frac{1}{4}$ ton along the way. How many tons of sand were delivered?

_____

5. The trucking company also needs to deliver $1\frac{2}{3}$ tons of oak logs and $1\frac{7}{12}$ tons of maple logs. Which load weighs more?

_____

6. In a load of $\frac{3}{4}$ ton of steel rods, $\frac{1}{8}$ of them are bent. How many tons of steel rods are bent?

_____

7. The company delivered $1\frac{3}{5}$ tons of bricks to one building site. They delivered $2\frac{1}{2}$ times this much to a second site. What was the weight of the load the company delivered to the second site?

_____

3-8 Name _____ Date _____

Remembering

Multiply.

1. 2,548 × 5

2. 21 × 45

3. 3,015 × 6

4. 33 × 4

5. 65 × 87

6. 215 × 9

Find each product by first rewriting each mixed number as a fraction.

7. $4\frac{4}{9} \cdot 2\frac{2}{3} =$ _____

8. $6\frac{1}{5} \cdot 10 =$ _____

9. $3\frac{5}{6} \cdot \frac{12}{13} =$ _____

10. $5\frac{1}{3} \cdot \frac{3}{5} =$ _____

Solve.

11. $\frac{6}{7} - \frac{2}{7}$

12. $\frac{4}{9} + \frac{2}{3}$

13. $\frac{2}{3} \cdot \frac{9}{10}$

14. $\frac{3}{5} \cdot \frac{5}{8}$

15. $8 - \frac{1}{7}$

16. $\frac{1}{6} + \frac{3}{8}$

17. Stretch Your Thinking Write and solve a word problem that requires multiplying two mixed numbers.

_____

_____

_____

_____

_____

3-9 **Homework**

Name _____ Date _____

Predict whether the product will be greater than, less than, or equal to the second factor. Then compute the product.

1. $\frac{4}{5} \cdot 6 = x$

Predict: x ◯ 6

Compute: $x =$ _____

2. $1\frac{1}{9} \cdot 6 = x$

Predict: x ◯ 6

Compute: $x =$ _____

3. $\frac{10}{10} \cdot 6 = x$

Predict: x ◯ 6

Compute: $x =$ _____

4. $\frac{2}{2} \cdot \frac{5}{6} = x$

Predict: x ◯ $\frac{5}{6}$

Compute: $x =$ _____

5. $\frac{5}{6} \cdot \frac{5}{6} = x$

Predict: x ◯ $\frac{5}{6}$

Compute: $x =$ _____

6. $1\frac{1}{3} \cdot \frac{5}{6} = x$

Predict: x ◯ $\frac{5}{6}$

Compute: $x =$ _____

Solve. *Show your work.*

7. James is $1\frac{3}{7}$ times as tall as his brother. His brother is $3\frac{1}{2}$ feet tall.

Is James's height more or less than $3\frac{1}{2}$ feet?

_____

How tall is James?

_____

8. South Middle School has 750 students. North Middle School has $\frac{13}{15}$ times as many students as South.

Does North Middle School have more or fewer than 750 students?

_____

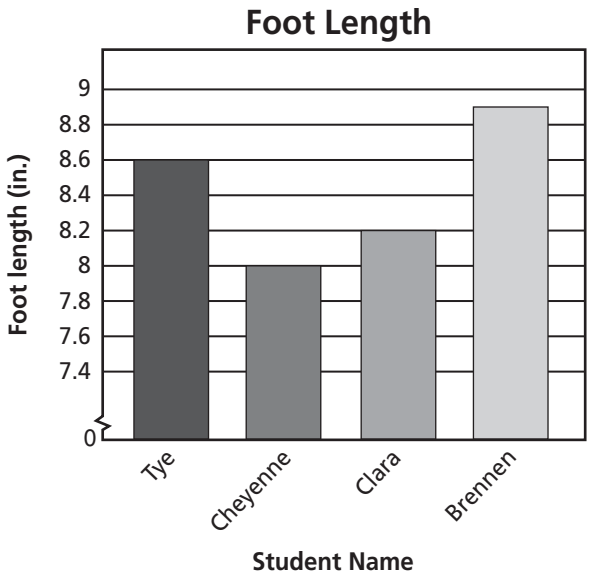
How many students attend North Middle School?

_____

Name _____ Date _____

Remembering

Perry measured the foot length of four friends for a science fair experiment. Then, he made a bar graph to display his results.



1. How much longer is Brennen's foot than Clara's foot?

_____

2. What is the difference between the longest foot and the shortest foot?

_____

Solve.

3. $\frac{7}{8} \cdot \frac{4}{9}$

4. $11 - \frac{3}{4}$

5. $\frac{4}{5} + \frac{7}{10}$

6. $\frac{9}{12} - \frac{5}{12}$

7. $\frac{7}{15} + \frac{2}{3}$

8. $\frac{5}{6} \cdot \frac{9}{11}$

Complete each fraction box.

$\frac{7}{12}$ and $\frac{5}{6}$	
>	
+	
−	
·	

$\frac{4}{5}$ and $\frac{2}{3}$	
>	
+	
−	
·	

9. Stretch Your Thinking Write two multiplication equations using fractions and mixed numbers. Write one equation that will have a product greater than the first factor. Then write another equation that will have a product less than the first factor.

_____

3-10

Homework

Name _____ Date _____

Divide

1. $5 \div 6 =$ _____

2. $9 \div \frac{1}{5} =$ _____

3. $33 \div 30 =$ _____

4. $8 \div \frac{1}{6} =$ _____

5. $3 \div 10 =$ _____

6. $4 \div \frac{1}{9} =$ _____

7. $100 \div \frac{1}{6} =$ _____

8. $1 \div 100 =$ _____

9. $\frac{1}{5} \div 8 =$ _____

10. $\frac{1}{8} \div 7 =$ _____

11. $\frac{1}{2} \div 9 =$ _____

12. $\frac{1}{3} \div 5 =$ _____

Solve. *Show your work.*

13. Alexander is dividing oranges into eighths. He has 5 oranges. How many eighths will he have?

_____

14. Carrie has 32 ounces of ice cream to divide equally among 10 people. How much ice cream will each person get?

_____

15. Nayati wants to swim 50 miles this school year. She plans to swim $\frac{1}{4}$ mile each day. How many days will it take her to swim 50 miles?

_____

16. Eric has $\frac{1}{3}$ of a watermelon to share equally with 3 friends. How much will each person get?

_____

17. A gardener needs to pack 16 pounds of beans into 20 bags. He wants all the bags to weigh about the same. About how much will each bag weigh?

_____

Name _____ Date _____

Remembering

Add or subtract.

1. $2\frac{3}{4} - 1\frac{5}{8}$

2. $4\frac{2}{3} + 1\frac{5}{9}$

3. $10\frac{1}{2} - 3\frac{4}{5}$

4. $7 - 2\frac{1}{6}$

5. $3\frac{2}{5} + 4\frac{5}{6}$

6. $8\frac{1}{3} + 1\frac{3}{4}$

Complete each fraction box.

7.

$\frac{2}{5}$ and $\frac{2}{7}$	
$>$	
$+$	
$-$	
$\cdot$	

8.

$\frac{5}{6}$ and $\frac{6}{7}$	
$>$	
$+$	
$-$	
$\cdot$	

Predict whether the product will be greater than, less than, or equal to the second factor. Then compute the product.

9. $\frac{2}{3} \cdot 5 = x$

Predict: x ◯ 5

Compute: $x =$ _____

10. $\frac{3}{3} \cdot 5 = x$

Predict: x ◯ 5

Compute: $x =$ _____

11. $1\frac{1}{6} \cdot 5 = x$

Predict: x ◯ 5

Compute: $x =$ _____

12. Stretch Your Thinking Draw a diagram to show how many twelfths there are in 3. Describe a situation in which you would need to know how many twelfths there are in 3.

_____

_____

_____

3-11

Homework

Name _____ Date _____

1. Consider the division problem $\frac{1}{2} \div 3$.

Describe a situation this division could represent.

_____

_____

Draw a diagram to represent the division. Then find the solution.

Write an equation. Then solve. *Show your work.*

2. A rectangle has an area of 12 square feet and a length of 5 feet. What is its width?

_____

3. A tortoise must walk $\frac{1}{12}$ mile to visit a friend. He plans to break the journey into four equal parts with breaks in between. How long will each part of his journey be?

_____

4. Harry worked 7 hours last week. This is $\frac{1}{3}$ as many hours as Aidan worked. How many hours did Aidan work?

_____

5. Lin is a camp counselor. She is making small bags of trail mix for campers to take on a hike. She has 2 pounds of raisins and is putting $\frac{1}{8}$ pound in each bag. How many bags can she fill before she runs out of raisins?

_____

6. Mr. Ramirez bought $\frac{1}{4}$ pounds of cashews. He divided the cashews equally among his three children. How much did each child get?

_____

3-11 Name _____ Date _____

Remembering

Add or subtract.

1. $1\frac{1}{8} + 4\frac{2}{3}$

2. $6\frac{1}{4} - 4\frac{5}{6}$

3. $9\frac{1}{3} + 7\frac{8}{9}$

4. $5\frac{2}{7} + 5\frac{11}{14}$

5. $4 - 2\frac{2}{5}$

6. $6\frac{5}{8} + 3\frac{1}{2}$

Predict whether the product will be greater than, less than, or equal to the second factor. Then compute the product.

7. $\frac{5}{5} \cdot 9 = x$

Predict: x ◯ 9

Compute: $x =$ _____

8. $\frac{7}{8} \cdot 9 = x$

Predict: x ◯ 9

Compute: $x =$ _____

9. $1\frac{3}{5} \cdot 9 = x$

Predict: x ◯ 9

Compute: $x =$ _____

10. $1\frac{1}{2} \cdot \frac{4}{5} = x$

Predict: x ◯ $\frac{4}{5}$

Compute: $x =$ _____

11. $\frac{6}{6} \cdot \frac{4}{5} = x$

Predict: x ◯ $\frac{4}{5}$

Compute: $x =$ _____

12. $\frac{2}{5} \cdot \frac{4}{5} = x$

Predict: x ◯ $\frac{4}{5}$

Compute: $x =$ _____

Divide.

13. $6 \div \frac{1}{4} =$ _____

14. $2 \div 3 =$ _____

15. $10 \div 3 =$ _____

16. $200 \div \frac{1}{4} =$ _____

17. $\frac{1}{4} \div 8 =$ _____

18. $\frac{1}{7} \div 6 =$ _____

19. Stretch Your Thinking Harrison is playing a board game that has a path of 100 spaces. After his first turn, he is $\frac{1}{5}$ of the way along the spaces. On his second turn, he moves $\frac{1}{4}$ fewer spaces than he moved on his first turn. On his third turn, he moves $1\frac{1}{4}$ times as many spaces than he moved on his first turn. What space is he on after three turns?

_____

3-12

Homework

Name _____ Date _____

Solve.

1. $5 \cdot \frac{1}{3} =$ _____

2. $5 \div \frac{1}{3} =$ _____

3. $\frac{1}{8} \div 2 =$ _____

4. $27 \div 10 =$ _____

5. $5 \div \frac{1}{100} =$ _____

6. $12 \cdot \frac{1}{9} =$ _____

7. $\frac{3}{5} \cdot \frac{10}{27} =$ _____

8. $16 \div \frac{1}{4} =$ _____

9. $\frac{1}{5} \div 10 =$ _____

10. $10 \div \frac{1}{5} =$ _____

11. $\frac{1}{8} \cdot 14 =$ _____

12. $18 \div 20 =$ _____

Tell whether you need to multiply or divide. Then solve. *Show your work.*

13. A dime weighs about $\frac{1}{12}$ ounce. Jody has 1 pound (16 ounces) of dimes. About many dimes does she have?

_____

14. Maddie has 180 coins. Of these coins, $\frac{1}{12}$ are dimes. About how many dimes does she have?

_____

15. A rectangle has length 3 feet and width $\frac{1}{4}$ foot. What is the area of the rectangle?

_____

16. A rectangle has area 3 square feet and width $\frac{1}{2}$ foot. What is the length of the rectangle?

_____

17. Nisha wants to study 5 hours for the spelling bee. If she studies $\frac{1}{3}$ hour per night, how many nights will she have to study?

_____

3-12 Name _____ Date _____

Remembering

Multiply.

1. $134 \cdot 5 =$ _____

2. $44 \cdot 21 =$ _____

3. $7 \cdot 57 =$ _____

4. $4{,}507 \cdot 3 =$ _____

5. $36 \cdot 76 =$ _____

6. $1{,}928 \cdot 6 =$ _____

Divide.

7. $\frac{1}{9} \div 2 =$ _____

8. $100 \div \frac{1}{3} =$ _____

9. $\frac{1}{5} \div 4 =$ _____

10. $4 \div 5 =$ _____

11. $12 \div 5 =$ _____

12. $8 \div \frac{1}{7} =$ _____

Write an equation. Then solve. *Show your work.*

13. Marc is running 5 kilometers at track practice. He decides to break the run into 3 equal lengths. How long will each length be?

_____

14. Stretch Your Thinking Using a whole number and a fraction as factors, write a multiplication equation with a product less than the whole number factor. Draw a picture to show how the product is less than the whole number factor.

_____

3-13 **Homework**

Name _____ Date _____

Solve. *Show your work.*

1. Dan's Ice Cream comes in cartons of two sizes. The large carton holds $4\frac{1}{2}$ pounds. The small carton holds $1\frac{3}{4}$ pounds less. How much ice cream does the small carton hold?

_____

2. Mac picked four baskets of blueberries. The weights of the berries in pounds are given below. Order the weights from lightest to heaviest.

$\frac{5}{4}$ $\frac{9}{10}$ $\frac{4}{5}$ $\frac{13}{20}$

_____

3. Four cones of Dan's Ice Cream hold $\frac{1}{2}$ pound. How much ice cream does each cone hold?

_____

4. If a dish of ice cream holds $\frac{1}{4}$ pound, how many dishes can you get from a $4\frac{1}{2}$-pound carton of Dan's Ice Cream?

_____

Solve. Give your answer in simplest form.

5. $3 \div \frac{1}{5} =$ _____

6. $1\frac{3}{4} + \frac{11}{16} =$ _____

7. $\frac{9}{14} \cdot 2\frac{1}{3} =$ _____

8. $2\frac{3}{5} \cdot 6 =$ _____

9. $\frac{1}{3} + \frac{3}{5} =$ _____

10. $\frac{5}{6} + \frac{8}{9} =$ _____

11. $\frac{1}{8} \div 4 =$ _____

12. $\frac{2}{5} - \frac{1}{10} =$ _____

13. $3\frac{5}{7} - 1\frac{1}{2} =$ _____

14. $\frac{7}{8} \cdot \frac{2}{7} =$ _____

3-13 Name _____ Date _____

Remembering

Use benchmarks of 0, $\frac{1}{2}$, and 1 to estimate the sum or difference. Then find the actual sum or difference.

1. $\frac{5}{10} + \frac{4}{9}$

Estimate: _____

Sum: _____

2. $\frac{13}{14} - \frac{3}{7}$

Estimate: _____

Difference: _____

3. $\frac{8}{9} - \frac{7}{8}$

Estimate: _____

Difference: _____

4. $\frac{13}{14} + \frac{3}{4}$

Estimate: _____

Sum: _____

Write an equation. Then solve. *Show your work.*

5. A rectangle has an area of 20 square feet and a length of 6 feet. What is its width?

_____

6. Bailey attends gymnastics practice for 8 hours each week. This is $\frac{1}{4}$ the number of hours that the gym is open for practice. How many hours is the gym open for practice?

_____

Solve.

7. $\frac{1}{4} \div 3 =$ _____

8. $\frac{1}{4} \cdot 3 =$ _____

9. $14 \cdot \frac{1}{6} =$ _____

10. Stretch Your Thinking How is solving $\frac{1}{8} \div 5$ different from solving $\frac{1}{8} \cdot 5$?

_____

_____

_____

_____

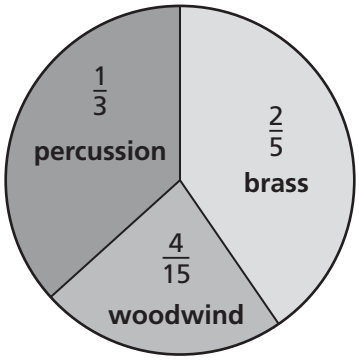
_____

Homework

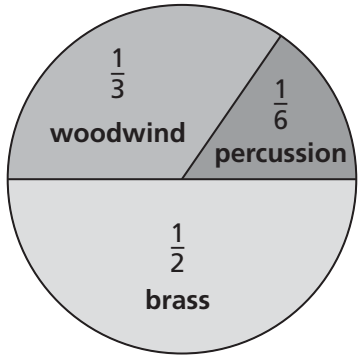
Name Date

These graphs show the instruments in two different high school marching bands.

Carter School Marching Band



Reagan School Marching Band



Solve. Use the circle graphs. *Show your work.*

1. The Reagan School Marching Band has three percussion musicians. How many musicians altogether are in the band?

_____

2. There are 30 musicians in the Carter School Marching Band. How many of them play brass instruments?

_____

Suppose both bands decide to combine and perform as one band.

3. What fraction of the band members will play a brass instrument?

_____

4. What fraction of the band members will play a percussion instrument?

_____

5. What fraction of the band members will play a woodwind instrument?

_____

3-14 Name _____ Date _____

Remembering

Solve. Explain how you know your answer is reasonable. *Show your work.*

1. James's garden has a length of $12\frac{1}{4}$ feet and a width of $9\frac{2}{3}$ feet. What length of fencing will he need to surround his garden?

Answer: _____

Why is the answer reasonable?

_____

_____

Solve.

2. $\frac{1}{11} \div 3 =$ _____

3. $6 \div \frac{1}{3} =$ _____

4. $\frac{2}{3} \cdot \frac{5}{7} =$ _____

5. $\frac{1}{12} \div 5 =$ _____

6. $7 \cdot \frac{1}{8} =$ _____

7. $\frac{1}{5} \cdot 12 =$ _____

Solve. *Show your work.*

8. Kayla packs 4 boxes that weigh $\frac{1}{6}$ pound altogether. What does each box weigh?

_____

9. Mrs. Blackwell put $4\frac{2}{3}$ grams on the scale during a lab in science class. Then, she added $2\frac{5}{6}$ grams to the scale. How many grams are on the scale in all?

_____

10. Stretch Your Thinking If you start with 1 and repeatedly multiply by $\frac{1}{2}$, will you reach 0? Explain why or why not.

_____

_____

_____

_____

4-1

Homework

Name _____ **Date** _____

Solve.

1. 40 × 2	**2.** 400 × 2	**3.** 400 × 20	**4.** 4,000 × 2
5. 80 × 60	**6.** 800 × 60	**7.** 800 × 6	**8.** 80 × 600
9. 70 × 20	**10.** 900 × 40	**11.** 800 × 70	**12.** 6,000 × 7

Solve. *Show your work.*

13. A tortoise walks 27 miles in a year. At this rate, how many miles will this tortoise walk in 10 years?

_____

14. If the tortoise lives to be 100 years old, how many miles will it walk during its lifetime?

_____

15. Every month, Paolo earns $40 for walking his neighbor's dog after school. How much does he earn from this job in one year?

_____

16. There are 60 seconds in a minute and 60 minutes in an hour. How many seconds are there in an hour?

_____

17. An elephant eats about 2,500 pounds of food in 10 days. About how much food does an elephant eat in 1,000 days?

_____

4-1 Name _____ Date _____

Remembering

Write the multiplier or divisor for each pair of equivalent fractions.

1. $\frac{4}{5} = \frac{12}{15}$

Multiplier = _____

2. $\frac{25}{60} = \frac{5}{12}$

Divisor = _____

3. $\frac{12}{20} = \frac{3}{5}$

Divisor = _____

4. $\frac{2}{3} = \frac{20}{30}$

Multiplier = _____

5. $\frac{27}{36} = \frac{3}{4}$

Divisor = _____

6. $\frac{1}{8} = \frac{7}{56}$

Multiplier = _____

Solve.

7. Jordan shoots 100 3-point shots per basketball practice. She makes 44 of these shots. What decimal represents the number of shots she makes?

_____

8. At a county fair, 9 people out of 1,000 earned a perfect score in a carnival game. What decimal represents the number of people who earned a perfect score?

_____

Solve.

9. $\frac{1}{6} \cdot 60 =$ _____

10. $\frac{1}{3} \cdot 21 =$ _____

11. $\frac{1}{9}$ of $81 =$ _____

12. $\frac{1}{3} \cdot 24 =$ _____

13. $\frac{1}{5}$ of $60 =$ _____

14. $\frac{1}{8} \cdot 16 =$ _____

15. Stretch Your Thinking Using a multiple of ten for at least one factor, write an equation with a product that has four zeros.

_____

Name _____ Date _____

Solve.

1. 60 × 40

2. 70 × 40

3. 700 × 60

4. 300 × 50

5. 40 × 50

6. 900 × 30

7. 400 × 80

8. 200 × 50

9. 300 × 200

The table shows the sizes of Farmer Reuben's fields. Use the table and a separate sheet of paper to help you answer each question.

 Corn Field	400 feet by 60 feet
 Wheat Field	700 feet by 200 feet
 Barley Field	200 feet by 200 feet

10. What is the area of the corn field?

_____

11. What is the area of the wheat field?

_____

12. What is the area of the barley field?

_____

13. How many square feet of land did Farmer Reuben plant in all?

_____

4-2 Name _____ Date _____

Remembering

Compare.

1. $\frac{5}{8} \bigcirc \frac{5}{7}$
2. $\frac{3}{4} \bigcirc \frac{5}{6}$
3. $\frac{9}{10} \bigcirc \frac{8}{9}$
4. $\frac{3}{8} \bigcirc \frac{5}{8}$
5. $\frac{1}{7} \bigcirc \frac{1}{8}$
6. $\frac{4}{5} \bigcirc \frac{4}{7}$

Multiply.

7. $\frac{5}{6} \cdot 36 =$ _____
8. $\frac{1}{8} \cdot 40 =$ _____
9. $\frac{2}{5} \cdot 60 =$ _____
10. $\frac{2}{3} \cdot 33 =$ _____
11. $\frac{3}{4} \cdot 36 =$ _____
12. $\frac{2}{9} \cdot 45 =$ _____

Solve.

13. $\begin{array}{r} 50 \\ \times\ 2 \\ \hline \end{array}$
14. $\begin{array}{r} 500 \\ \times\ 2 \\ \hline \end{array}$
15. $\begin{array}{r} 5{,}000 \\ \times\ 2 \\ \hline \end{array}$
16. $\begin{array}{r} 60 \\ \times\ 40 \\ \hline \end{array}$
17. $\begin{array}{r} 600 \\ \times\ 40 \\ \hline \end{array}$
18. $\begin{array}{r} 600 \\ \times\ 4 \\ \hline \end{array}$

19. **Stretch Your Thinking** Explain how to predict the number of zeros in the product for the expression $600 \cdot 500$.

_____

_____

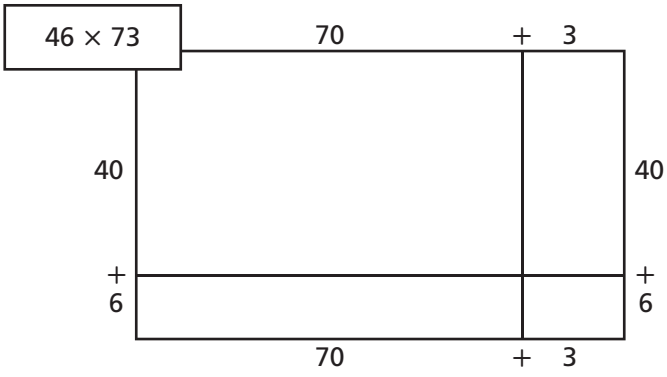
_____

4-3 Homework

Name _____ Date _____

Solve the first problem with Place Value Sections.
Solve the other problems using any method you like.
Use a separate sheet of paper.

1.



2. 84 × 19

3. 67 × 53

4. 91 × 28

Solve. *Show your work.*

5. Kamini needs to know the area of her yard so that she can buy the right amount of grass seed. The yard is 26 feet by 19 feet. What is the area of Kamini's yard in square feet?

_____

6. A restaurant has 16 crates of juice. Each crate holds 12 gallons of juice. How many gallons of juice are there altogether?

_____

7. Mr. Jackson is taking 23 students to see a movie. Tickets for the movie cost 75 cents. How much money will Mr. Jackson spend on student tickets?

_____

8. There are usually 20 school days in a month. Grace has band practice for 60 minutes every day after school. How many minutes does she usually practice each month?

_____

4-3 Name _____ Date _____

Remembering

Compare. Write > (greater than) or < (less than).

1. 0.7 ◯ 0.71

2. 0.2 ◯ 0.02

3. 0.76 ◯ 0.68

4. 0.31 ◯ 0.43

5. 0.21 ◯ 0.12

6. 0.346 ◯ 0.348

Estimate the sum or difference by rounding each mixed number to the nearest whole number. Then find the actual sum or difference.

7. $2\frac{1}{8} + 6\frac{6}{7}$

Estimate: _____

Sum: _____

8. $7\frac{9}{10} - 4\frac{1}{9}$

Estimate: _____

Difference: _____

9. $5\frac{7}{8} - 1\frac{1}{10}$

Estimate: _____

Difference: _____

10. $6\frac{3}{8} + 7\frac{2}{5}$

Estimate: _____

Sum: _____

Multiply.

11. 80 × 60

12. 200 × 30

13. 400 × 40

14. 600 × 50

15. 500 × 10

16. 300 × 90

17. Stretch Your Thinking Explain how to check multiplication using addition or division. Include an example in your explanation.

_____

_____

_____

4-4

Homework

Name _____ Date _____

Solve. Use any method.

1. 78 × 26

2. 93 × 42

3. 39 × 84

4. 56 × 71

The table shows how many newspapers are delivered each week by three paper carriers.
Use the table to answer the questions.
Use 1 year = 52 weeks.

Papers Delivered Each Week

Jameel	93
Clare	97
Mason	98

Show your work.

5. How many papers does Jameel deliver in a year?

_____

6. How many papers does Clare deliver in a year?

_____

7. How could you find how many papers Mason delivers in a year without doing any multiplication? What is the answer?

_____

_____

_____

Solve.

8. Ray needs to know the area of his floor so he can buy the right amount of carpet. The floor is 21 feet by 17 feet. What is the area of the floor?

_____

9. Maria is buying flowers. Each tray of flowers costs $24. If she buys 15 trays, what will the total cost be?

_____

4-4 Name _____ Date _____

Remembering

Copy each exercise. Then subtract.

1. 9,000 − 865 = _____ **2.** 105.66 − 98.53 = _____ **3.** 45,688 − 5.65 = _____

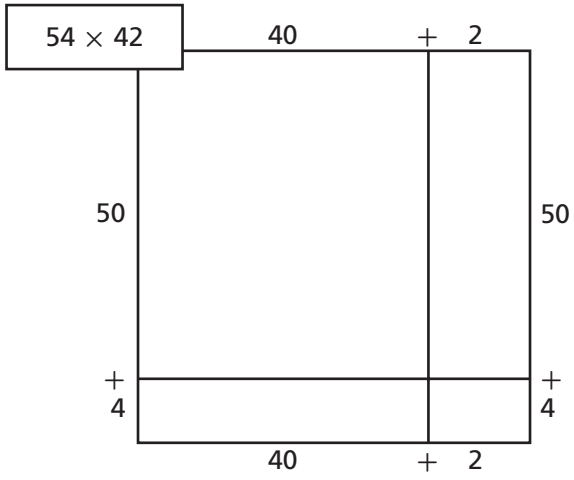
Multiply. You do not need to simplify.

4. $\frac{5}{7} \cdot \frac{1}{3} =$ _____ **5.** $\frac{3}{5} \cdot \frac{1}{5} =$ _____ **6.** $\frac{1}{5} \cdot \frac{2}{7} =$ _____

7. $\frac{2}{3} \cdot 5 =$ _____ **8.** $\frac{3}{4} \cdot \frac{3}{4} =$ _____ **9.** $\frac{1}{2} \cdot \frac{5}{9} =$ _____

Solve the first problem with Place-Value Sections. Solve the other problems using any method you like.

10.



11. 15 × 42

12. 65 × 81

13. 48 × 24

14. Stretch Your Thinking How is multiplying a 1-digit number and a 2-digit number the same as, and different from, multiplying two 2-digit numbers?

_____

_____

_____

_____

_____

4-5

Homework

Name _____ Date _____

Multiply.

1. 397 × 9	**2.** 723 × 7	**3.** 4,188 × 3	**4.** 4,294 × 4
5. 67 × 82	**6.** 56 × 49	**7.** 36 × 29	**8.** 87 × 71
9. 28 × 27	**10.** 37 × 54	**11.** 63 × 91	**12.** 73 × 35
13. 46 × 83	**14.** 57 × 75	**15.** 94 × 47	**16.** 66 × 86

Solve.

17. Jamal is building a bed for his dog. The dimensions of the bed are 27 inches by 36 inches. What is the area of the bottom of the bed?

_____

18. Mr. Battle drives 9 miles to work every day. He works 5 days a week. How many miles does he travel to and from work over 52 weeks?

_____

4-5 Name _____ Date _____

Remembering

Add or subtract.

1. $3\frac{3}{4} + 2\frac{1}{8}$

2. $4\frac{1}{5} - 2\frac{3}{10}$

3. $5\frac{2}{5} + 3\frac{1}{3}$

4. $6\frac{5}{6} + 2\frac{5}{12}$

5. $10 - 2\frac{3}{5}$

6. $3\frac{2}{5} + 1\frac{1}{15}$

Find each product by first rewriting each mixed number as a fraction.

7. $\frac{2}{9} \cdot 2\frac{2}{3} =$ _____

8. $1\frac{3}{5} \cdot 10 =$ _____

9. $4\frac{1}{4} \cdot 1\frac{1}{3} =$ _____

10. $2\frac{2}{5} \cdot \frac{3}{7} =$ _____

Solve. Use any method.

11. 64×87

12. 76×35

13. 53×41

14. 24×72

15. 19×66

16. 58×36

17. Stretch Your Thinking Explain how to use mental math to find the product of 64 and 25.

_____

_____

_____

4-6

Homework

Name _____ Date _____

Solve.

1. 0.9 × 7	**2.** 0.6 × 80	**3.** 0.04 × 9	**4.** 0.05 × 70	**5.** 0.16 × 7
6. 7.0 × 8	**7.** 0.09 × 30	**8.** 0.07 × 60	**9.** 0.17 × 81	**10.** 940 × 0.2
11. 3.43 × 7	**12.** 0.29 × 86	**13.** 0.15 × 196	**14.** 1.57 × 52	**15.** 2.03 × 121

Three runners started making a table for April to show how far they run every day, every week, and the entire month.

Show your work.

16. Finish the table for the runners.

Runner	Miles Per Day	Miles Per Week	Miles in April
Cedric	0.6	7 × 0.6 =	30 × 0.6 =
Shannon	2.4		
Regina	1.75		

17. Give the total miles in May for each runner below.

Cedric: _____ Shannon: _____ Regina: _____

Name _____ Date _____

Remembering

Add.

1. $\frac{2}{7} + \frac{1}{5}$

2. $\frac{1}{3} + \frac{2}{5}$

3. $\frac{1}{3} + \frac{1}{8}$

4. $\frac{1}{2} + \frac{1}{5}$

5. $\frac{4}{5} + \frac{1}{6}$

6. $\frac{5}{8} + \frac{1}{10}$

Copy each exercise. Then add.

7. 46¢ + $3.48 =

_____

8. 0.23 m + 0.54 m =

_____

9. 33¢ + $11 =

_____

Multiply.

10.
$$\begin{array}{r} 458 \\ \times \quad 3 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 893 \\ \times \quad 6 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 6{,}236 \\ \times \quad 7 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 6{,}982 \\ \times \quad 5 \\ \hline \end{array}$$

14. Stretch Your Thinking Marissa bought four bottles of water. Each bottle of water was 95 cents. Write an equation with the same product as the total cost but different factors.

_____

_____

4-7

Homework

Name _____ **Date** _____

Solve.

1. $0.3 \times 0.6 =$ _____ **2.** $0.4 \times 0.07 =$ _____ **3.** $0.03 \times 0.8 =$ _____

4. $5 \times 0.07 =$ _____ **5.** $0.02 \times 0.3 =$ _____ **6.** $0.05 \times 0.9 =$ _____

7. $\begin{array}{r} 1.8 \\ \times\ 6 \\ \hline \end{array}$ **8.** $\begin{array}{r} 0.23 \\ \times\ 40 \\ \hline \end{array}$ **9.** $\begin{array}{r} 0.14 \\ \times\ 0.9 \\ \hline \end{array}$ **10.** $\begin{array}{r} 0.36 \\ \times\ 0.8 \\ \hline \end{array}$

11. $\begin{array}{r} 1.4 \\ \times\ 0.5 \\ \hline \end{array}$ **12.** $\begin{array}{r} 0.32 \\ \times\ 51 \\ \hline \end{array}$ **13.** $\begin{array}{r} 0.6 \\ \times\ 0.14 \\ \hline \end{array}$ **14.** $\begin{array}{r} 2.6 \\ \times\ 0.9 \\ \hline \end{array}$

Solve using mental math.

15. $82 \times 0.01 =$ _____ **16.** $385 \times 0.1 =$ _____ **17.** $2{,}194 \times 0.01 =$ _____

Solve.

18. Simon sold bottles of water at the marathon on Saturday for $0.75 per bottle. He sold 43 bottles. How much money did he earn?

_____

19. Lauren has 9.9 meters of ribbon. She is cutting it into 100 equal pieces. That is the same as multiplying 9.9 by 0.01. How long will each piece of ribbon be?

_____

20. A furlong is a unit of measure used in horse racing. Every year, horses race 10 furlongs in the Kentucky Derby. One furlong is equal to 0.125 mile. How long is the Kentucky Derby in miles?

_____

4-7 Name _____ Date _____

Remembering

Use the Distributive Property to rewrite each problem so it has only two factors. Then solve.

1. $(7 \times 200) + (7 \times 800) =$ _____

2. $(44 \times 3) + (56 \times 3) =$ _____

Multiply. Simplify first if you can.

3. $\frac{5}{8} \cdot \frac{6}{7} =$ _____

4. $\frac{1}{5} \cdot \frac{2}{9} =$ _____

5. $\frac{1}{2} \cdot \frac{4}{9} =$ _____

6. $\frac{2}{3} \cdot \frac{15}{16} =$ _____

7. $\frac{1}{8} \cdot \frac{6}{7} =$ _____

8. $\frac{9}{10} \cdot \frac{5}{6} =$ _____

Solve.

9.
$$\begin{array}{r} 0.7 \\ \times\ 6 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 0.02 \\ \times\ 60 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 0.15 \\ \times\ 34 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.41 \\ \times\ 66 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 1.24 \\ \times\ 6 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 260 \\ \times\ 0.3 \\ \hline \end{array}$$

15. Stretch Your Thinking Explain where to place the decimal point in the product for the expression $0.5 \cdot 0.03$.

_____

_____

_____

_____

_____

4-8

Homework

Name _____ **Date** _____

Solve.

1. 4.2×8.1

2. 9.4×6.3

3. 0.78×4.7

4. 0.05×3.7

5. 0.3×1.52

6. 0.80×3.8

7. 7.1×4.5

8. 2.4×0.64

9. 0.06×5.7

10. 9.9×6.6

11. 8.1×5.7

12. 0.07×24.3

Complete. Name the property used.

13. $(4.3 \times 6.2) - (\_\_\_\_ \times 1.1) =$
$4.3 \times (6.2 - 1.1)$

_____

14. $8.9 \times (5.3 \times 3.4) =$
$(8.9 \times \_\_\_\_) \times 3.4$

_____

Solve.

15. Lester's car can go 15.4 miles on 1 gallon of gas. How far can he go on 0.7 gallon?

_____

16. Clara wants to cover the top of her jewelry box. The top of the box is a rectangle with a length of 9.4 cm and a width of 8.3 cm. What is the total area she wants to cover?

_____

Name _____ Date _____

Remembering

Solve. Explain how you know your answer is reasonable. Show your work.

1. A rectangular sand box has a length of $5\frac{1}{3}$ feet and a width of $3\frac{3}{4}$ feet. What is its perimeter?

Answer: _____

Why is the answer reasonable?

_____

_____

Solve. Show your work.

2. Kelly babysits for $5\frac{5}{6}$ hours on the weekend. This is $2\frac{1}{12}$ hours more than she babysits during the week. How many hours does she babysit during the week?

_____

3. Lucas is making a recipe that requires $\frac{1}{4}$ cup of wheat flour and $1\frac{7}{8}$ cups of white flour. Altogether, how may cups of flour does the recipe require?

_____

Solve.

4. $0.5 \times 0.4 =$ _____ **5.** $0.6 \times 0.09 =$ _____ **6.** $0.08 \times 0.3 =$ _____

7. $\begin{array}{r} 1.7 \\ \times\ 8 \\ \hline \end{array}$ **8.** $\begin{array}{r} 0.55 \\ \times\ 50 \\ \hline \end{array}$ **9.** $\begin{array}{r} 0.07 \\ \times\ 0.7 \\ \hline \end{array}$

10. Stretch Your Thinking Write a decimal equation that has a product of 3.15. (Do not use 1 as a factor.)

_____

4-9 **Homework**

Name _____ Date _____

Solve.

1. 4.8×100

2. 2.9×0.3

3. 0.56×20

4. 0.69×0.7

5. 2.6×3.4

6. 3.8×0.5

7. 1.5×4.9

8. 3.4×1.6

Complete the equations.

9. $0.7 \times 10^1 =$ _____

$0.7 \times 10^2 =$ _____

$0.7 \times 10^3 =$ _____

10. $0.98 \times 10^1 =$ _____

$0.98 \times 10^2 =$ _____

$0.98 \times 10^3 =$ _____

11. $5.63 \times 10^1 =$ _____

$5.63 \times 10^2 =$ _____

$5.63 \times 10^3 =$ _____

12. $3.7 \times 10^1 =$ _____

$3.7 \times 10^2 =$ _____

$3.7 \times$ _____ $= 3{,}700$

13. $2.04 \times 10^1 =$ _____

$2.04 \times$ _____ $= 204$

$2.04 \times 10^3 =$ _____

14. $0.42 \times$ _____ $= 4.2$

$0.42 \times 10^2 =$ _____

$0.42 \times 10^3 =$ _____

Solve.

Show your work.

15. The Sunrise Café gets tea bags in boxes of 1,000. If the café charges $1.75 for each cup of tea, and each cup of tea gets one tea bag, how much money does the café receive if they use a whole box of 1,000 teabags?

_____

16. If a box of tea bags costs $95, how much money does the café actually make after they have used up the box of tea and have paid for it?

_____

4-9 Name _____ Date _____

Remembering

Add or subtract.

1. $10 - 3\frac{3}{4}$

2. $\frac{5}{8} + \frac{3}{8}$

3. $6\frac{4}{5} - 1\frac{1}{5}$

4. $2\frac{1}{3} + 5\frac{1}{3}$

5. $1\frac{2}{9} + 3\frac{5}{9}$

6. $5\frac{1}{2} - \frac{1}{2}$

Copy each exercise. Then add or subtract.

7. $0.67 + 0.42 =$ _____

8. $7 - 3.2 =$ _____

9. $7.8 - 0.8 =$ _____

Solve.

10.
$$\begin{array}{r} 4.3 \\ \times\ 6.7 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 0.70 \\ \times\ 5.6 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.32 \\ \times\ 2.4 \\ \hline \end{array}$$

13. Stretch Your Thinking Complete the equation $8.9 \cdot \square = 8{,}900$ using a power of ten. Explain how the product will change if the exponent changes.

_____

_____

_____

_____

_____

4-10

Homework

Name _____ Date _____

Round to the nearesth tenth.

1. 0.38 _____ **2.** 0.94 _____ **3.** 0.621 _____ **4.** 0.087 _____

Round to the nearest hundredth.

5. 0.285 _____ **6.** 0.116 _____ **7.** 0.709 _____ **8.** 0.563 _____

Write an estimated answer for each problem.
Then find and write each exact answer.

	Estimated Answer	Exact Answer
9.	$38 \times 92 \approx$ _____ $\times$ _____ $\approx$ _____	$38 \times 92 =$ _____
10.	$8.1 \times 4.2 \approx$ _____ $\times$ _____ $\approx$ _____	$8.1 \times 4.2 =$ _____
11.	$7.65 \times 0.9 \approx$ _____ $\times$ _____ $\approx$ _____	$7.65 \times 0.9 =$ _____
12.	$3.8 \times 6.02 \approx$ _____ $\times$ _____ $\approx$ _____	$3.8 \times 6.02 =$ _____
13.	$1.02 \times 0.9 \approx$ _____ $\times$ _____ $\approx$ _____	$1.02 \times 0.9 =$ _____

Solve. *Show your work.*

14. A factory makes 394 motorcycles each week. If there are 52 weeks in a year, how many motorcycles will the factory make in a year?

Estimate: _____

Exact answer: _____

15. CDs are $15.25 each. How much will it cost to buy 3?

Estimate: _____

Exact answer: _____

4-10 Name _____ Date _____

Remembering

Round to the nearest whole number.

1. 5.159 _____ **2.** 12.7 _____ **3.** 4.872 _____

Round to the nearest tenth.

4. 45.461 _____ **5.** 3.12 _____ **6.** 77.039 _____

Write an equation. Then solve. *Show your work.*

7. A rectangle has an area of 48 square feet and a length of 10 feet. What is its width?

_____

8. A length of string that is 22 feet long is being cut into pieces that are $\frac{1}{3}$ foot long. How many pieces will there be?

_____

Solve.

9. 100 × 3.7

10. 5.6 × 0.4

11. 0.14 × 60

12. 7.1 × 2.9

13. 6.8 × 0.5

14. 5.8 × 1.2

15. Stretch Your Thinking Taylor estimated the music department would raise $1,100 for new uniforms by selling tickets to a performance next week. Each ticket will be $12.75. About how many tickets does the music department need to sell for Taylor's estimate to be reasonable?

_____

_____

Name _____ Date _____

Find each product.

1. 57×0.31

2. 0.29×74

3. 7.6×8.3

4. 0.35×94

5. 4.8×0.92

6. 6.5×0.81

7. 84×0.13

8. 0.9×0.04

Solve. Check that your answers are reasonable. *Show your work.*

9. Josefina is buying 10 pounds of salmon which costs $6.78 per pound. How much will the salmon cost?

_____

10. It is 9.2 miles between Mr. Rossi's place of work and his home. Because he comes home for lunch, he drives this distance 4 times a day. How far does Mr. Rossi drive each day?

_____

11. Mr. Rossi works 20 days a month. How far does he drive in a month?

_____

12. Gayle is saving to buy a bicycle. The bicycle costs $119.90. She has saved 0.7 of what she needs. How much has she saved so far?

_____

Name _____ Date _____

Remembering

Multiply.

1. $98 \cdot 15 =$ _____ **2.** $658 \cdot 7 =$ _____ **3.** $54 \cdot 7 =$ _____

4. $3{,}147 \cdot 4 =$ _____ **5.** $5{,}609 \cdot 2 =$ _____ **6.** $66 \cdot 75 =$ _____

Write your answers as fractions.

7. $\frac{2}{9} \cdot 5 =$ _____ **8.** $\frac{3}{4} \cdot 9 =$ _____ **9.** $\frac{2}{3} \cdot 7 =$ _____

10. $\frac{7}{12} \cdot 15 =$ _____ **11.** $\frac{5}{8} \cdot 3 =$ _____ **12.** $\frac{5}{6} \cdot 9 =$ _____

Round to the nearest tenth.

13. 0.43 _____ **14.** 0.88 _____ **15.** 0.076 _____

Round to the nearest hundredth.

16. 0.456 = _____ **17.** 0.109 _____ **18.** 0.541 = _____

19. Stretch Your Thinking Write a multiplication word problem using decimals for both factors. Then solve your word problem.

_____

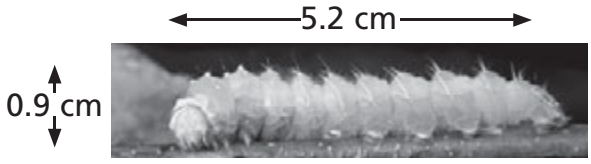
_____

_____

_____

Name Date

The life cycle of a butterfly has four stages. One stage is a caterpillar



Using the length and height of the caterpillar shown, use the descriptions below to draw the adult butterfly that develops from the caterpillar. Remember, a tenth of a centimeter is a millimeter.

- The length of your butterfly should be 3.6 times the height of the caterpillar.
- The wingspan of your butterfly should be 1.75 times the length of the caterpillar.

4-12 Name _____ Date _____

Remembering

Write a decimal number for each word name.

1. six hundredths

_____

2. fourteen and eight thousandths

_____

3. nine thousandths

_____

4. five tenths

_____

Solve.

5. $\frac{1}{2} \div 10 =$ _____

6. $\frac{1}{5} \cdot 4 =$ _____

7. $12 \cdot \frac{1}{4} =$ _____

8. $\frac{1}{9} \div 3 =$ _____

9. $\frac{2}{3} \cdot \frac{2}{5} =$ _____

10. $3 \div \frac{1}{6} =$ _____

Find each product.

11.
$$\begin{array}{r} 0.48 \\ \times\ 23 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.35 \\ \times\ 13 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 0.86 \\ \times\ 91 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 0.37 \\ \times\ 6.5 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 0.22 \\ \times\ 76 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 5.4 \\ \times\ 3.2 \\ \hline \end{array}$$

17. Stretch Your Thinking Sarah is stringing insect beads to make a bracelet. The butterfly bead is 0.45 inch long and the ladybug bead has a length of 0.27 inch. She uses each type of insect bead and places them end to end. How many of each type of bead does she use to make a line of insect beads measuring 1.71 inches?

_____

5-1

Homework

Name _____ **Date** _____

Complete each division. Check your answer.

1. $5\overline{)4{,}820}$

2. $8\overline{)7{,}548}$

3. $9\overline{)7{,}535}$

4. $3\overline{)2{,}958}$

5. $7\overline{)5{,}857}$

6. $6\overline{)5{,}556}$

7. $7\overline{)6{,}945}$

8. $8\overline{)5{,}624}$

9. $4\overline{)3{,}254}$

Solve. Use estimation to check the solution. *Show your work.*

10. Mrs. Wong drove between Chicago and St. Louis 8 times last month. Altogether she drove 2,376 miles. How far is it from Chicago to St. Louis?

_____

11. Jay has 6,200 beads. He is making bracelets with 9 beads each. How many bracelets can he make? How many beads will be left?

_____

12. There are 5,280 feet in a mile. There are 3 feet in a yard. How many yards are there in a mile?

_____

13. The Pencil Pal factory wraps pencils in packages of 6. Today there are 5,750 pencils to be packaged. How many packages will there be? How many pencils will be left over?

_____

5-1 Name _____ Date _____

Remembering

Write each fraction as a decimal.

1. $\frac{2}{10}$ _____
2. $\frac{556}{1,000}$ _____
3. $\frac{6}{100}$ _____
4. $\frac{17}{100}$ _____
5. $\frac{23}{1,000}$ _____
6. $\frac{5}{1,000}$ _____
7. $\frac{1}{10}$ _____
8. $\frac{33}{100}$ _____
9. $\frac{85}{100}$ _____

Solve.

10. 400×70
11. 300×30
12. 700×40
13. 20×50
14. 900×50
15. 800×30

Solve. *Show your work.*

16. Sarah is dividing pies into eighths. She has 4 pies. How many eighths will she have?

_____

17. The track team plans to sprint 20 miles this school year. The runners will sprint $\frac{1}{4}$ mile each day. How many days will it take them to sprint 20 miles?

_____

18. **Stretch Your Thinking** Mrs. Thomas bought a bed for $1,548 and three armchairs. The bed cost 4 times as much as one armchair. How much did Mrs. Thomas spend altogether?

_____

5-2

Homework

Name _____ **Date** _____

Divide.

1. $39\overline{)2{,}886}$ **2.** $81\overline{)7{,}533}$ **3.** $68\overline{)4{,}967}$ **4.** $72\overline{)4{,}968}$

5. $28\overline{)2{,}520}$ **6.** $33\overline{)1{,}287}$ **7.** $46\overline{)1{,}426}$ **8.** $55\overline{)990}$

Solve.

Show your work.

9. The lunchroom has enough seats for 168 students. Each class has 24 students. How many classes can eat in the lunchroom at the same time?

_____

10. Mrs. Randall bought tickets to the art museum for all the fifth-grade students. Each ticket cost $12, and the total cost of the tickets was $1,152. How many fifth-grade students are there?

_____

11. The Harmony Hotel has a total of 1,596 rooms. There are 42 rooms on each floor. How many floors does the Harmony Hotel have?

_____

12. This year Martin earned $1,615 mowing lawns, shoveling driveways, and doing yardwork. This is 19 times as much as he earned last year. How much did Martin earn last year?

_____

5-2 Name Date

Remembering

Solve. Use any method. *Show your work.*

1. 68 × 21

2. 36 × 92

3. 25 × 44

Complete each division. Check your answer.

4. $5\overline{)1{,}267}$

5. $3\overline{)1{,}374}$

6. $7\overline{)4{,}618}$

7. Chloe sorts her beads. The number of red beads she has is $5\frac{5}{6}$ times the number of green beads. If she has 60 green beads, how many red beads does she have?

_____

8. Brad plans to bike $15\frac{3}{4}$ miles. He has gone $\frac{2}{3}$ of the entire distance. How far has he gone?

_____

9. Stretch Your Thinking Write and solve a division problem that divides a 4-digit number by a 2-digit number. How did you estimate the first digit of the quotient?

_____

_____

5-3

Homework

Name _____ Date _____

Divide.

1. $34\overline{)7,276}$ **2.** $85\overline{)6,120}$ **3.** $73\overline{)4,309}$ **4.** $38\overline{)3,576}$

5. $57\overline{)4,722}$ **6.** $26\overline{)7,903}$ **7.** $65\overline{)5,918}$ **8.** $69\overline{)1,796}$

Solve.

Show your work.

9. A carousel factory has 1,252 carousel horses. 48 horses are placed on each carousel. How many carousels can the factory build?

_____

How many horses will be left over?

_____

10. Farmer Parson collected 1,183 chicken eggs this morning. He will put them in cartons that hold a dozen eggs each.

How many cartons will he fill?

_____

How many eggs will be left over?

_____

11. Write a division word problem using 7,903 and 26.

_____

_____

_____

5-3 Name _____ Date _____

Remembering

Multiply. Simplify first if you can.

1. $\frac{3}{4} \cdot \frac{12}{13} =$ _____

2. $\frac{1}{4} \cdot \frac{3}{7} =$ _____

3. $\frac{7}{8} \cdot \frac{4}{5} =$ _____

4. $\frac{3}{8} \cdot \frac{4}{15} =$ _____

5. $\frac{4}{5} \cdot \frac{10}{12} =$ _____

6. $\frac{1}{5} \cdot \frac{5}{6} =$ _____

Complete the equations.

7. $0.65 \times 10^1 =$ _____
$0.65 \times 10^2 =$ _____
$0.65 \times 10^3 =$ _____

8. $0.8 \times 10^1 =$ _____
$0.8 \times 10^2 =$ _____
$0.8 \times 10^3 =$ _____

9. $2.45 \times 10^1 =$ _____
$2.45 \times 10^2 =$ _____
$2.45 \times 10^3 =$ _____

Divide.

10. $41\overline{)3{,}444}$

11. $36\overline{)1{,}944}$

12. $93\overline{)7{,}254}$

13. In Marla's school, $\frac{6}{15}$ of the students do not ride the bus to school. Of these students $\frac{5}{9}$ walk to school. What fraction of the students in Marla's school walk to school?

_____

14. Stretch Your Thinking Ben starts with a certain number of fruit chew packages. He puts 27 packages into each of 85 cases. He has 3 packages left. How many packages of fruit chews did Ben start with? Explain how you know.

_____

_____

_____

5-4

Homework

Name _____ Date _____

Solve. Circle the choice that tells how you gave your answer.

Show your work.

1. A Ferris wheel holds 48 people. There are 823 people with tickets to ride the Ferris wheel. How many times will the Ferris wheel need to be run to give everyone a ride?

whole number only	*round up*	*mixed number*	*decimal*	*remainder only*

2. Bananas cost 89 cents each at the fruit stand. Isabel has $11.75. How many bananas can she buy?

whole number only	*round up*	*mixed number*	*decimal*	*remainder only*

3. The 15 members of a running club made $1,338 selling magazines. They will divide the money equally. How much should each runner get?

whole number only	*round up*	*mixed number*	*decimal*	*remainder only*

4. There are 524 goldfish in the fish pond. They will be put in indoor tanks for the winter. If each tank holds 45 fish, how many tanks will be needed?

whole number only	*round up*	*mixed number*	*decimal*	*remainder only*

5. Mr. Lopez made 339 ounces of strawberry jam. He plans to divide the jam equally among his 12 cousins. How many ounces of jam will each cousin get?

whole number only	*round up*	*mixed number*	*decimal*	*remainder only*

5-4 Name _____ Date _____

Remembering

Compare. Write > (greater than) or < (less than).

1. 0.6 ◯ 0.06

2. 0.4 ◯ 0.41

3. 0.87 ◯ 0.8

4. 0.67 ◯ 0.76

5. 0.44 ◯ 0.39

6. 0.657 ◯ 0.668

Divide.

7. $66\overline{)5{,}745}$

8. $54\overline{)4{,}806}$

9. $36\overline{)2{,}597}$

Solve.

Show your work.

10. Martin asked friends to buy raffle tickets. On Saturday, he sold tickets to 5 of the 12 friends he asked. On Sunday, he sold tickets to 7 of the 9 friends he asked. On which day did he sell tickets to the greater fraction of the friends he asked?

_____

11. Emma bought $\frac{7}{8}$ yard of striped ribbon and $\frac{8}{9}$ yard of solid ribbon. Which kind of ribbon did she buy more of?

_____

12. Stretch Your Thinking Write and solve a division word problem for which the remainder is the answer.

_____

_____

_____

_____

5-5

Homework

Name _____ **Date** _____

1. $7\overline{)3{,}990}$

2. $44\overline{)2{,}156}$

3. $5\overline{)7{,}003}$

4. $28\overline{)1{,}763}$

5. $54\overline{)4{,}458}$

6. $6\overline{)3{,}039}$

Solve.

Show your work.

7. This morning, a factory produced 6,000 cans of beans and packaged them in boxes of 48 cans. How many boxes were filled?

_____

8. Six friends earned $645 for painting some rooms in a neighbor's house. If they divide the money equally, how much will each friend get?

_____

9. The floor of a ballroom has an area of 2,470 square feet. If the length of the floor is 65 feet, what is its width?

_____

10. Felipe just started collecting stamps. He has 36 stamps so far. His uncle Carlo has 1,890 stamps in his collection. The number of stamps Carlo has is how many times the number Felipe has?

_____

5-5 Name _____ Date _____

Remembering

Multiply.

1. 326 × 2	**2.** 575 × 5	**3.** 5,492 × 8	**4.** 4,512 × 9
5. 58 × 43	**6.** 79 × 52	**7.** 36 × 21	**8.** 89 × 67

Solve. Give your answer in simplest form.

9. $\frac{1}{8} \div 5 =$ _____ **10.** $\frac{1}{4} \cdot 1\frac{2}{3} =$ _____ **11.** $\frac{5}{6} - \frac{2}{3} =$ _____

12. $6 \div \frac{1}{3} =$ _____ **13.** $\frac{5}{6} + \frac{5}{8} =$ _____ **14.** $6\frac{3}{4} \cdot \frac{1}{6} =$ _____

Solve. Circle the choice that tells how you gave your answer. Show your work.

15. A rollercoaster holds 45 people. There are 387 people waiting to board the rollercoaster. How many times will the rollercoaster need to run to give everyone a ride?

_____

whole number only	*round up*	*mixed number*	*decimal*	*remainder only*

16. Stretch Your Thinking I am a number less than 3,000. When you divide me by 32, my remainder is 30. When you divide me by 58, my remainder is 44. What number am I?

_____

5-6

Homework

Name _____ Date _____

Solve.

1. $9\overline{)6.57}$

2. $5\overline{)36.41}$

3. $4\overline{)9.584}$

4. $6\overline{)207.9}$

5. $23\overline{)153.87}$

6. $7\overline{)654.5}$

7. $45\overline{)431.1}$

8. $2\overline{)7.006}$

9. $16\overline{)5.76}$

Solve. *Show your work.*

10. Teresa bought 16 roses for $20.64. How much did she pay for each rose?

_____

11. Barry's dog Cubby is 1.26 meters long. Cubby is 7 times as long as Douglas's guinea pig Taffy. How long is Taffy?

_____

12. Farmer Sanchez has 1,408.86 acres of land. He will divide it into 27 equal fields for spring planting. How many acres will be in each field?

_____

13. Six friends will stay at a cabin in the woods this weekend. The distance to the cabin is 148.5 miles. Each person will drive one sixth of the distance. How far will each person drive?

_____

Name _____ Date _____

Remembering

Solve.

Show your work.

1. Aiden buys a pair of jeans that costs $45.28. The sales tax that will be added to the cost of the jeans is $3.62. What is the total cost of the jeans?

_____

2. When Madison got her kitten, Fluffy, he weighed 787.37 grams. He now weighs 2,085.8 grams more than he did when Madison first brought him home. How much does Fluffy weigh now?

_____

Solve.

3. $\begin{array}{r} 150 \\ \times\ 0.6 \\ \hline \end{array}$

4. $\begin{array}{r} 3.41 \\ \times\ 48 \\ \hline \end{array}$

5. $\begin{array}{r} 2.28 \\ \times\ 5 \\ \hline \end{array}$

6. $\begin{array}{r} 0.9 \\ \times\ 4 \\ \hline \end{array}$

7. $\begin{array}{r} 0.45 \\ \times\ 86 \\ \hline \end{array}$

8. $\begin{array}{r} 0.03 \\ \times\ 80 \\ \hline \end{array}$

Divide.

9. $33\overline{)2{,}143}$

10. $9\overline{)4{,}140}$

11. $4\overline{)6{,}403}$

12. Stretch Your Thinking What part of this problem needs to be changed to make it correct? Explain how you know.
$46 \div 8 = 6.75$

_____

_____

_____

5-7

Homework

Name _____ **Date** _____

Solve.

Show your work.

1. Nella and Lydia are hiking 15 miles today. After every 0.5 mile, they will stop and rest. How many times will they rest during the hike?

_____

2. A cookie cutter shark is 0.4 meter long, and a thresher shark is 6 meters long. How many times as long as the cookie cutter shark is the thresher shark?

_____

3. At a large wedding, the cakes were cut into hundredths, so each piece was 0.01 of a whole cake. If there were 12 cakes, how many pieces were there?

_____

4. A millimeter is 0.001 of a meter. How many millimeters are there in 7 meters?

_____

5. Paco saves $0.75 each day for a new bicycle helmet. He has saved $36. For how many days has Paco been saving?

_____

Solve.

6. $0.9\overline{)63}$ **7.** $0.08\overline{)72}$ **8.** $0.007\overline{)42}$ **9.** $0.6\overline{)420}$

10. $0.4\overline{)372}$ **11.** $0.6\overline{)534}$ **12.** $0.26\overline{)884}$ **13.** $0.71\overline{)1{,}136}$

5-7 Name _____ Date _____

Remembering

Solve. *Show your work.*

1. Tyler is making a history project and needs two poster boards. He cuts one to measure 42.25 inches in length. He cuts the second to measure 34.75 inches in length. What is the difference between the two lengths of poster board?

_____

2. Ella has $2,251.88 in her bank account. She withdraws $852. How much money is left in her bank account?

_____

Solve.

3. 0.05×0.4

4. 2.5×5

5. 0.32×70

6. 0.2×0.8

7. 0.09×0.4

8. 0.6×0.09

Solve.

9. $5\overline{)17.4}$

10. $6\overline{)416.46}$

11. $7\overline{)32.55}$

12. Stretch Your Thinking Look at the division problem $112 \div 0.056$. Without solving, how many zeros will be in the quotient? How do you know?

_____

_____

_____

_____

5-8

Homework

Name _____ **Date** _____

Divide.

1. $0.07\overline{)4.2}$ **2.** $0.8\overline{)2.4}$ **3.** $0.05\overline{)4.8}$ **4.** $0.24\overline{)2.064}$

5. Circle the division that does *not* have the same answer as the others.

54 ÷ 6 5.4 ÷ 0.6 0.54 ÷ 0.6 0.54 ÷ 0.06 0.054 ÷ 0.006

Solve. *Show your work.*

6. A beekeeper collected 7.6 liters of honey. She will pour it into bottles that each hold 0.95 liter. How many bottles will she fill?

_____

7. A very small dinosaur, the microraptor, was only 1.3 feet long. One of the largest dinosaurs, the diplodocus, was about 91 feet long. How many times as long as the microraptor was the diplodocus?

_____

8. Tomorrow, in the town of Eastwood, there will be a big race. The course is 5.25 kilometers long. A water station will be set up every 0.75 kilometer, including at the finish line. How many water stations will there be?

_____

9. Marisol's bedroom has an area of 29.76 square meters. The length of the room is 6.2 meters. What is its width?

_____

5-8 Name _____ Date _____

Remembering

Round to the nearest tenth.

1. 1.28 _____ **2.** 14.21 _____ **3.** 8.148 _____

Round to the nearest hundredth.

4. 4.769 _____ **5.** 45.124 _____ **6.** 16.107 _____

Solve.

7. $\begin{array}{r} 7.7 \\ \times\ 1.4 \\ \hline \end{array}$ **8.** $\begin{array}{r} 3.1 \\ \times\ 0.05 \\ \hline \end{array}$ **9.** $\begin{array}{r} 5.79 \\ \times\ 0.9 \\ \hline \end{array}$

10. $\begin{array}{r} 3.4 \\ \times\ 8.8 \\ \hline \end{array}$ **11.** $\begin{array}{r} 3.5 \\ \times\ 0.46 \\ \hline \end{array}$ **12.** $\begin{array}{r} 8.6 \\ \times\ 0.90 \\ \hline \end{array}$

Solve.

13. $0.9\overline{)36}$ **14.** $0.006\overline{)48}$ **15.** $0.04\overline{)32}$

16. $0.7\overline{)364}$ **17.** $0.34\overline{)2{,}210}$ **18.** $0.83\overline{)1{,}494}$

19. Stretch Your Thinking Must a decimal divisor and a decimal dividend have the same number of decimal places in order to have a whole-number quotient? Write a division equation using two decimal numbers to support your answer.

_____

5-9

Homework

Name _____ **Date** _____

Divide.

1. $0.7\overline{)35}$

2. $0.06\overline{)24}$

3. $0.8\overline{)0.64}$

4. $0.03\overline{)18}$

5. $3\overline{)33}$

6. $0.05\overline{)0.65}$

7. $12\overline{)72}$

8. $0.04\overline{)11.56}$

9. $8\overline{)216}$

10. $0.8\overline{)490.4}$

11. $28\overline{)2{,}380}$

12. $0.033\overline{)5.148}$

Solve. Explain how you know your answer is reasonable. *Show your work.*

13. Georgia works as a florist. She has 93 roses to arrange in vases. Each vase holds 6 roses. How many roses will Georgia have left over?

_____

_____

14. Julia is jarring peaches. She has 25.5 cups of peaches. Each jar holds 3 cups. How many jars will Julia need to hold all the peaches?

_____

_____

15. The area of a room is 114 square feet. The length of the room is 9.5 feet. What is the width of the room?

_____

_____

5-9 Name _____ Date _____

Remembering

Add or subtract.

1. $1\frac{1}{2} + 5\frac{5}{6}$

2. $2\frac{3}{5} + 5\frac{3}{10}$

3. $1\frac{1}{3} - \frac{1}{6}$

4. $7\frac{3}{10} + 2\frac{1}{5}$

5. $9\frac{1}{8} - 2\frac{3}{4}$

6. $12 - 5\frac{2}{3}$

Find each product.

7. 7.8×1.2

8. 3.3×0.67

9. 91×0.49

10. 0.25×72

11. 68×0.17

12. 0.76×28

Divide.

13. $0.08\overline{)6.4}$

14. $0.8\overline{)7.2}$

15. $0.07\overline{)5.67}$

16. $0.58\overline{)5.336}$

17. $0.9\overline{)6.3}$

18. $0.05\overline{)1.75}$

19. Stretch Your Thinking Write a real world division problem for which you would drop the remainder.

_____

_____

_____

5-10 Homework

Name _____ Date _____

Multiply or divide.

1. $1.5 \times 5 =$ _____ **2.** $0.4 \times 0.05 =$ _____ **3.** $0.004 \times 0.03 =$ _____

4. 0.55×0.07 **5.** 0.25×0.12 **6.** 22.3×6.2 **7.** 20.8×0.26

8. $0.3\overline{)0.108}$ **9.** $0.11\overline{)407}$ **10.** $0.67\overline{)32.16}$ **11.** $0.44\overline{)105.6}$

For each problem, decide whether you need to multiply or divide. Then solve. Explain how you know your answer is reasonable.

Show your work.

12. Harriet makes yo-yos. She needs 38 inches of string for each yo-yo. How many yo-yos can she make with 875 inches of string? How many inches of string will be left over?

_____

_____

13. Roberto will save $\frac{1}{6}$ of his allowance each day. If he gets $2.00 a day, about how much money will he save each day? Round your answer to the nearest penny.

_____

_____

14. Raisins cost $0.97 per pound. Michael bought $15.52 worth of raisins. How many pounds of raisins did he buy?

_____

_____

5-10 Name _____ Date _____

Remembering

Multiply.

1. 47 × 7	**2.** 181 × 3	**3.** 4,609 × 5	**4.** 2,115 × 6
5. 86 × 75	**6.** 22 × 15	**7.** 53 × 25	**8.** 38 × 36

Divide.

9. $0.06\overline{)24}$ **10.** $0.3\overline{)228.6}$ **11.** $0.08\overline{)28.4}$

Tell whether you need to multiply or divide. Then solve. *Show your work.*

12. A rectangle has an area of 4 square meters. The width is $\frac{1}{5}$ meter. What is the length of the rectangle?

_____

13. Audubon Preschool has 154 children in one age group. One seventh of those children arrive for early morning drop off. How many children arrive for early morning drop off?

_____

14. Stretch Your Thinking Write a division word problem that requires dividing two decimals to solve. Write a multiplication equation to check your answer.

_____

_____

_____

_____

5-11

Homework

Name **Date**

Dividing numbers involves dividends, divisors, and quotients.

$$\text{divisor}\overline{)\text{dividend}}\quad \text{quotient}$$

Write a division problem (including the quotient) that satisfies all three statements.

Show your work.

1. The dividend is a one-digit whole number.
The divisor is a one-digit whole number.
The quotient is a one-digit whole number.

2. The dividend is a two-digit whole number.
The divisor is a one-digit whole number.
The quotient is a one-digit whole number.

3. The dividend is a two-digit whole number.
The divisor is less than 1, and a number in tenths.
The quotient is a two-digit whole number.

4. The dividend is a two-digit whole number.
The divisor is greater than 1, and a number in tenths.
The quotient is a two-digit whole number.

5. The dividend is a number in tenths.
The divisor is a one-digit whole number.
The quotient is a number in tenths.

6. The dividend is a decimal in hundredths.
The divisor is a decimal in hundredths.
The quotient is a one-digit whole number.

7. The dividend is a decimal in hundredths.
The divisor is a decimal in hundredths.
The quotient is a two-digit whole number.

5-11 Name _____ Date _____

Remembering

Add or subtract.

1. $21 + 1.08 =$ _____ **2.** $0.62 + 0.49 =$ _____ **3.** $0.06 + 0.5 =$ _____

4. $6 - 0.09 =$ _____ **5.** $3.01 - 0.8 =$ _____ **6.** $12.05 - 8 =$ _____

Complete each fraction box.

7.

$\frac{1}{3}$ and $\frac{4}{9}$	
$>$	
$+$	
$-$	
$\cdot$	

8.

$\frac{2}{7}$ and $\frac{1}{4}$	
$>$	
$+$	
$-$	
$\cdot$	

Multiply or divide.

9. $\begin{array}{r} 37.5 \\ \times\ 3.5 \\ \hline \end{array}$ **10.** $\begin{array}{r} 0.63 \\ \times\ 0.27 \\ \hline \end{array}$ **11.** $0.93\overline{)567.3}$

12. Stretch Your Thinking Use the term *dividend*, *divisor*, or *quotient* to complete each sentence. Then write a division equation that fits the description.

The _____ is a decimal in thousandths.

The _____ is a decimal in thousandths.

The _____ is a two-digit whole number.

Division problem: _____

6-1

Homework

Name _____ Date _____

Write an equation and use it to solve the problem.
Draw a model if you need to.

1. Two professional baseball teams played a four-game series. Attendance for the first three games was 126,503 people, What was the Game 4 attendance if 171,318 people altogether attended the series?

Show your work.

_____

2. In the past, shares of stock were bought and sold in fractions of a dollar. Suppose one share of stock, purchased for $72\frac{1}{4}$ dollars per share, decreased in value to $66\frac{3}{8}$ dollars per share. What was the decrease in value per share?

_____

3. Two shipping containers are being loaded into the cargo hold of a ship. One container weighs 2.3 tons. What is the weight of the other container if the total weight of both containers is 4.15 tons?

_____

4. The heights of horses are often measured in units called hands. Abigail's pony is $13\frac{1}{4}$ hands tall. How much taller is Jermaine's horse if it is $16\frac{1}{2}$ hands tall?

_____

5. Jake plays baseball with two wooden bats—one made from hickory and one made from white ash. What is the weight of his white ash bat if his hickory bat weighs 32.4 ounces, and both bats together weigh 64.33 ounces?

_____

6. Seventeen fewer people attended the second basketball game of the season than attended the first game. One hundred ninety-two people attended the second game. How many people attended the first game?

_____

6-1 Name _____ Date _____

Remembering

Add or subtract.

1. $4\frac{1}{8} + 1\frac{5}{8} =$

2. $4\frac{3}{5} + 6\frac{1}{5} =$

3. $6\frac{2}{3} - 5\frac{1}{3} =$

4. $7 - 1\frac{1}{2} =$

5. $8\frac{3}{4} - 2\frac{3}{4} =$

6. $\frac{2}{7} + \frac{4}{7} =$

7. $15 - 3\frac{1}{7}$

8. $5\frac{4}{5} + 1\frac{1}{8}$

9. $11\frac{1}{5} - 9\frac{3}{4}$

10. $1\frac{5}{6} + \frac{1}{3}$

11. $2\frac{2}{3} + 7\frac{5}{9}$

12. $6\frac{3}{7} + 1\frac{1}{14}$

Copy each exercise. Then subtract.

13. 12,389 − 2.75 =

_____

14. 165.98 − 127.2 =

_____

15. 326.55 − 23.81 =

_____

16. Stretch Your Thinking Garrett wants to buy a new soccer ball, a pair of shorts, and a pair of soccer shoes. The ball costs $12.55, the shorts cost $22.98, and the shoes cost $54.35. Garrett has $85.00. How much more money does Garrett need? Write an equation to solve the problem.

_____

_____

6-2

Homework

Name _____ Date _____

Solve each problem. Draw a model if you need to.

Show your work.

1. Spectators for a high school football game sit in bleachers along one side of the field. Altogether, the bleachers seat 1,152 spectators in 16 rows of equal length. How many spectators can be seated in one row of the bleachers?

_____

2. How many periods of time, each $\frac{1}{3}$ of an hour long, does a 8-hour period of time represent?

_____

3. The area of a rectangular ceiling is 130.5 square feet, and one measure of the ceiling is 14.5 feet. What is the other measure of the ceiling?

_____

4. Sorbet is a frozen dessert that is often made from fruit. How many portions, each weighing $\frac{1}{10}$ of a kilogram, can a French dessert chef create from 3 kilograms of sorbet?

_____

5. The family room floor in Zack's home has a rectangular area rug that measures 6.5 feet by 9 feet. The floor is rectangular and measures 10 feet by 12 feet. What area of the floor is not covered by the rug?

_____

6. A cargo van is carrying 20 identical steel cylinders. Each cylinder contains compressed oxygen. Altogether, the cylinders weigh $\frac{1}{2}$ of a ton.

a. In tons, what is the weight of each cylinder?

_____

b. One ton = 2,000 pounds. In pounds, what is the weight of each cylinder?

_____

6-2 Name _____ Date _____

Remembering

Multiply.

1. $\frac{6}{7} \cdot 42 =$ _____
2. $\frac{1}{3} \cdot 36 =$ _____
3. $\frac{4}{5} \cdot 15 =$ _____
4. $\frac{1}{4} \cdot 28 =$ _____
5. $\frac{5}{9} \cdot 81 =$ _____
6. $\frac{3}{8} \cdot 72 =$ _____

Write an equation. Then solve. *Show your work.*

7. There is $\frac{1}{4}$ of a peach pie left after a family picnic. Four cousins share the leftover pie equally. What fraction of a whole pie will each cousin receive?

_____

8. Tully has 24 stamps in his collection. This is $\frac{1}{3}$ times the number Jordan has. How many stamps does Jordan have?

_____

Write an equation to solve the problem. Draw a model if you need to.

9. Candace jumped 11.45 feet in a long jump competition. What is the length of Maria's jump if she jumped 1.05 fewer feet than Candace?

_____

10. **Stretch Your Thinking** Ms. Jackson has $97.00 to spend on games for her classroom. She buys six board games that cost $11.95 each and a video game that costs $24.10. How much money does Ms. Jackson have left to buy more games? Write an equation to solve the problem.

_____

_____

6-3

Homework

Name _____ Date _____

Write a word problem for the equation.
Draw a model to show the product.

Show your work.

1. $\frac{2}{3} \cdot 3 = \frac{6}{3}$

2. $\frac{3}{4} \cdot \frac{1}{2} = \frac{3}{8}$

3. $2 \div \frac{1}{4} = 8$

6-3 Name _____ Date _____

Remembering

Complete each fraction box.

1.

$\frac{3}{4}$ and $\frac{5}{6}$	
>	
+	
−	
·	

2.

$\frac{3}{5}$ and $\frac{8}{15}$	
>	
+	
−	
·	

Solve. *Show your work.*

3. A $1,508 award is shared equally by 8 people. What is each person's share of the award?

_____

4. Felipe has 54 coins in his collection. His brother Pedro has 1,269 coins. The number of coins Pedro has is how many times the number his brother has?

_____

Write an equation to solve the problem. Draw a model if you need to.

5. How many periods of time, each $\frac{1}{6}$ of an hour long, does a 10-hour period of time represent?

_____

6. Stretch Your Thinking Write a word problem for the following equation. $\frac{4}{5} \cdot \frac{1}{4} + \frac{3}{5} = \frac{4}{5}$

_____

_____

_____

_____

_____

6-4

Homework

Name _____ Date _____

Write an equation to solve the problem. Use mental math or estimation to show that your answer is reasonable.

Show your work.

1. In a speed test, a computer took 12.4 seconds to complete one task, and 37.8 seconds to complete a more difficult task. How much time was needed to complete both tasks?

Equation: _____

Estimate: _____

_____

2. To walk to school, Pablo first walks $\frac{1}{2}$ kilometer to Tanya's house. Then Pablo and Tanya walk $\frac{3}{5}$ kilometer to school. How far does Pablo walk to school?

Equation: _____

Estimate: _____

_____

3. Each Saturday morning, Andy works 4 hours and earns $34. At that rate, what does Andy earn for each hour he works?

Equation: _____

Estimate: _____

_____

4. Yuri completed a race in 0.88 fewer seconds than Josie. Josie's time was 23.95 seconds. How long did it take Yuri to complete the race?

Equation: _____

Estimate: _____

_____

_____

6-4 Name _____ Date _____

Remembering

Write an estimated answer for each problem. Then find and write each exact answer.

	Estimated Answer	Exact Answer
1. $41 \times 77 \approx$	_____ × _____ ≈ _____	$41 \times 77 =$ _____
2. $3.8 \times 1.9 \approx$	_____ × _____ ≈ _____	$3.8 \times 1.9 =$ _____
3. $7.3 \times 5.01 \approx$	_____ × _____ ≈ _____	$7.3 \times 5.01 =$ _____

Divide.

4. $45\overline{)6{,}733}$ **5.** $61\overline{)7{,}892}$ **6.** $28\overline{)3{,}123}$

Write a word problem for the equation. Draw a model to show the product.

7. $\frac{5}{6} \cdot 4 = \frac{20}{6}$

_____

_____

_____

_____

_____

8. Stretch Your Thinking Kaley has $2\frac{3}{8}$ yards of fabric. She cuts and uses $1\frac{1}{16}$ yards from the fabric. She estimates that less than 1 yard of fabric is left over. Is her estimate reasonable? Explain.

_____

_____

_____

6-5

Homework

Name _____ Date _____

Solve each problem.

Show your work.

1. Michael has 21 T-shirts. One third of them are blue. How many of Michael's T-shirts are blue?

_____

2. There are 476,092 fish in the city aquarium. That number of fish is 476,070 more fish than Nadia has in her aquarium. How many fish does Nadia have in her aquarium?

_____

3. Anne-Marie has saved 9 dollars for a new coat. That is $\frac{1}{6}$ as much money as she needs. How much does the coat cost?

_____

4. Last year it rained on 63 days in Mudville. There were 7 times as many days of rain in Mudville as in Desert Hills. How many days did it rain in Desert Hills last year?

_____

5. Maria wants to buy a new car. She will choose a green car or a silver car. The green car costs $16,898, and the silver car costs $1,059.75 less than the green car. What is the cost of the silver car?

_____

6. At a country-music concert, 48 people played guitars. That number is 6 times as many as the number of people who played banjos. How many people at the concert played banjos?

_____

7. There are 8 apples left on the table. There are $\frac{1}{4}$ as many apples as bananas left on the table. How many bananas are there?

_____

6-5 Name _____ Date _____

Remembering

Add or subtract.

1. $6\frac{6}{7} + 2\frac{3}{14}$

2. $1\frac{2}{3} - \frac{5}{9}$

3. $12\frac{4}{5} - 8\frac{5}{10}$

4. $11 - 5\frac{5}{11}$

5. $7\frac{1}{5} + 1\frac{2}{3}$

6. $9\frac{3}{4} + 2\frac{5}{6}$

7. Use the number line to find $\frac{2}{3} \cdot \frac{4}{5}$.

Label all the parts above and below. _____

Write an equation to solve the problem. Use mental math or estimation to show that your answer is reasonable.

8. Terrell runs two timed drills at practice. The first drill takes 33.5 seconds and the second drill takes 28.2 seconds. How much time does it take him to complete both drills?

Equation: _____

Estimate: _____

_____

_____

9. Stretch Your Thinking Maverick has a $12\frac{3}{4}$-foot-long streamer to decorate a hallway at his school. He cuts off $\frac{3}{8}$ of a foot from each end to make it fit the hallway. His principal asks him to make another streamer that is $\frac{5}{6}$ as long. How long is the new streamer?

_____

6-6

Homework

Name _____ Date _____

Solve. Draw a model if you will find it helpful.

1. A flagpole flying the Ohio state flag is $\frac{9}{10}$ the height of a 30-foot-tall flagpole that is flying the U.S. flag. What is the height (*h*) in feet of the flagpole flying the Ohio state flag?

_____

2. The number of students in the Period 7 study hall at Jin's school is 4 times the number of students in Jin's home room. How many students (*s*) are in the study hall if there are 16 students in Jin's home room?

_____

3. The enrollment at Roosevelt High School is 1,045 students, which is 5 times the enrollment of Truman Middle School. How many students (*s*) are enrolled at Truman Middle School?

_____

4. A truck weighs 5,400 pounds. An open-wheel race car weighs $\frac{1}{4}$ as much. How much does the race car weigh?

_____

5. Owen and Maya each studied for a test. Owen studied for 90 minutes and Maya studied for 0.5 times that length of time. Who studied more? Multiply to check your prediction.

Prediction: _____

6. Sonia's family has 2 children, which is $\frac{2}{3}$ the number of children in Zeke's family. Which family has more children? Divide to check your prediction.

Prediction: _____

6-6 Name _____ Date _____

Remembering

Copy each exercise. Then add or subtract

1. $22.09 - 17 =$ _____

2. $7 - 0.05 =$ _____

3. $4.07 - 0.3 =$ _____

4. $44 + 5.06 =$ _____

5. $0.07 + 0.8 =$ _____

6. $0.55 + 0.31 =$ _____

Solve.

7. $0.5 \times 0.04 =$ _____

8. $0.3 \times 0.7 =$ _____

9. $0.07 \times 0.2 =$ _____

10.
$$\begin{array}{r} 0.46 \\ \times\ 80 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 0.06 \\ \times\ 0.8 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 3.2 \\ \times\ 9 \\ \hline \end{array}$$

Solve each problem. *Show your work.*

13. A soccer team has 35 soccer balls. One fifth of the balls are made of leather. How many of the balls are leather?

_____

14. There are 56 fifth graders who play basketball. That is 7 times the number of fifth graders who play tennis. How many fifth graders play tennis?

_____

15. Stretch Your Thinking Samantha draws a hopscotch diagram on the sidewalk in front of her house. The diagram is 10 feet long. Her neighbor asks her to draw a 4-foot hopscotch diagram on a canvas mat. In simplest form, what fraction of the length of Samantha's diagram is her neighbor's diagram?

_____

6-7

Homework

Name _____ Date _____

Write an equation and use it to solve the problem. Draw a model it you need to.

Show your work.

1. The Yukon River is 1,980 miles long, and twice as long as the Platte River. How many miles long *(l)* is the Platte River?

_____

2. The height of the Empire State Building in New York City is 1,250 feet, and 364 fewer feet than the height of the World Financial Center building in Shanghai, China. What is the height *(h)* of the World Financial Center building?

_____

3. Olivia is 48 inches tall, and $\frac{2}{3}$ as tall as her brother Cameron. In inches, how tall *(t)* is Cameron?

_____

4. Sydney is shopping for a new television. The cost of a 32-inch LCD flat screen is $149.95. The cost of 46-inch LED flat screen is $280.04 more. What is the cost *(c)* of the 46-inch LED flat screen television?

_____

5. After arriving home from school, Luis read for $\frac{1}{3}$ of an hour. If he reads for $1\frac{1}{6}$ hours after dinner, how many hours *(h)* will Luis have read altogether?

_____

6. Each morning, Jared needs 60 minutes to get ready for school. Kiara needs $\frac{7}{12}$ as much time as Jared. How many minutes does Kiara need each morning to get ready for school?

_____

7. When compared to Tasha, Liam spent 20 additional minutes doing homework. Liam took 45 minutes to complete his homework. How long did it take Tasha?

_____

6-7 Name _____ Date _____

Remembering

Solve.

1. 6.9×4.2

2. 7.3×0.90

3. 5.8×0.54

4. 5.3×0.08

5. 0.7×6.25

6. 9.4×1.7

Divide.

7. $0.05\overline{)4.5}$

8. $0.3\overline{)1.5}$

9. $0.04\overline{)2.32}$

10. $0.64\overline{)4.928}$

11. $0.6\overline{)5.43}$

12. $0.08\overline{)4.32}$

Solve. Draw a model if you will find it helpful.

13. The gymnasium at Audubon Middle School is $\frac{5}{6}$ the height of a 30-foot-tall building that is next to the gymnasium. What is the height (h) in feet of the gymnasium?

_____

14. Amiee's karate instructor has 595 students. That is 5 times the number of students that her dance instructor has. How many students does her dance instructor have?

_____

15. Stretch Your Thinking Draw a model that shows $5 \cdot \frac{3}{5} = 3$.

_____

6-8

Homework

Name _____ Date _____

Solve each problem if possible. If a problem does not have enough information, write the information that is needed to solve the problem.

Show your work.

1. At the school bookstore, Quinn purchased a binder for $4.75 and 4 pens for $0.79 each. What was Quinn's total cost (*c*)?

_____

2. A school bus has 12 rows of seats, and 4 students can be seated in each row. How many students (*s*) are riding the bus if 11 rows are filled with students, and 2 students are riding in the twelfth row?

_____

3. A group of 16 friends visited an amusement park. When they arrived, $\frac{3}{4}$ of the friends wanted to ride the fastest roller coaster first. How many friends (*f*) wanted to ride?

_____

4. Zeke is shipping clerk for a large business. Today he spent 90 minutes preparing boxes for shipping. One box weighed 10 pounds and 7 boxes each weighed $3\frac{1}{2}$ pounds. What is the total weight (*w*) of the boxes?

_____

5. A middle school faculty parking lot has 3 rows of parking spaces with 13 spaces in each row, and 1 row of 7 spaces. How many vehicles (*v*) can be parked in the faculty lot?

_____

6. Rochelle's homework always consists of worksheets. Last night, the average amount of time she needed to complete each worksheet was 15 minutes. How much time (*t*) did Rochelle spend completing worksheets last night?

_____

6-8 Name Date

Remembering

Multiply.

1. $\begin{array}{r} 56 \\ \times\ 3 \\ \hline \end{array}$

2. $\begin{array}{r} 256 \\ \times\ 7 \\ \hline \end{array}$

3. $\begin{array}{r} 3{,}801 \\ \times\ 6 \\ \hline \end{array}$

4. $\begin{array}{r} 4{,}239 \\ \times\ 9 \\ \hline \end{array}$

5. $\begin{array}{r} 84 \\ \times\ 23 \\ \hline \end{array}$

6. $\begin{array}{r} 67 \\ \times\ 18 \\ \hline \end{array}$

7. $\begin{array}{r} 88 \\ \times\ 39 \\ \hline \end{array}$

8. $\begin{array}{r} 42 \\ \times\ 45 \\ \hline \end{array}$

Multiply or divide.

9. $0.67\overline{)502.5}$

10. $0.21\overline{)945}$

11. $\begin{array}{r} 0.55 \\ \times\ 0.30 \\ \hline \end{array}$

12. $\begin{array}{r} 32.5 \\ \times\ 6.3 \\ \hline \end{array}$

Write an equation and use it to solve the problem. Draw a model it you need to.

13. Lindsay is shopping for a new CD player. The cost of one CD player she is considering is $56.55. The cost of a higher priced CD player is $14.25 more. What is the cost (c) of the higher priced CD player?

_____

14. Stretch Your Thinking Use the equation below to write a word problem. Leave out one piece of information that is needed to solve the problem and describe the information that should have been included. $b = (5 \cdot 6) + 10$

_____

_____

_____

_____

_____

6-9

Homework

Name _____ Date _____

Solve each problem.

Show your work.

1. After a deposit of $100, a withdrawal of $125, and a deposit of $24, the balance in a savings account was $27.28. What was the balance (*b*) before the deposits and withdrawal?

_____

2. The charge for a plumbing repair was $29.60 for parts, $1\frac{1}{4}$ hours for labor at $56 per hour, and a $40 for the service call. What was the total cost (*c*) of the repair?

_____

3. Ebi, Jose, Derell, and Asami measured their heights. Ebi's height was 2.5 cm greater than Jose's height. Jose's height was 3.1 cm greater than Derell's height. Derell's height was 0.4 cm less than Asami's height. Ebi is 162.5 cm tall. How tall (*t*) is Asami?

_____

4. A school bus has 22 rows of seats, and 4 students can be seated in each row. Students riding in the bus have filled 19 rows of seats, and $\frac{1}{2}$ of the remaining seats. How many seats on the bus are empty (*e*)?

_____

5. Rosa is 13 years and 6 months old and her brother Malcolm is 11 years and 6 months old. Their great grandfather is 89 years old. How many years (*y*) older is the great grandfather than the combined ages of Rosa and Malcolm?

_____

6. A riverfront business offers raft trips. The capacity of each raft is 4 people. Suppose 29 adults and 22 children would like to raft. If each raft is filled to capacity, how many people (*p*) will be aboard the last raft?

_____

6-9 Name _____ Date _____

Remembering

Solve.

1. 500 × 60

2. 500 × 50

3. 900 × 40

4. 30 × 10

5. 200 × 70

6. 300 × 80

Complete each division. Check your answer.

7. $7\overline{)3{,}451}$

8. $4\overline{)2{,}155}$

9. $8\overline{)4{,}122}$

10. $5\overline{)1{,}242}$

11. $3\overline{)2{,}114}$

12. $9\overline{)5{,}778}$

Write and solve an equation to solve the problem. If the problem does not have enough information, write the information that is needed to solve the problem.

13. Danny has $14.75, Jason has $22.10, and Trey has $87.45. How much more money (*m*) does Trey have than the combined amounts of the other two boys?

Show your work.

_____

14. Stretch Your Thinking Write a multistep word problem in which the remainder is the solution. Write an equation that will solve it.

_____

_____

_____

_____

_____

6-10

Homework

Name _____ Date _____

Solve each problem.

Show your work.

1. A savings account balance was $135.10 before a withdrawal of $60, a deposit of $22.50, and a withdrawal of $45. What was the balance *(b)* after the withdrawals and deposit?

_____

2. The charge for a bicycle repair was $9.28 for parts, $\frac{1}{4}$ hour of labor at $18 per hour, and a $2 shop fee. What was the total cost *(c)* of the repair?

_____

3. While shopping at the school bookstore, Ric purchased 4 book covers for $1.25 each, and a pen that cost $\frac{2}{5}$ as much as a book cover. What amount of change *(c)* did Ric receive if he paid for his purchase with a $10 bill?

_____

4. A junior baseball team plays 16 games each summer. Last summer the team scored an average of 3.25 runs per game during the first half of the season. The team scored a total of 29 runs during the second half of the season. How many runs *(r)* were scored by the team last season?

_____

5. Four family members compared their ages. Terell is 3 years younger than Danny. Danny is 1 year younger than Pablo. Pablo's age is $\frac{1}{3}$ Shaniqua's age. How old is Terell (t) if Shaniqua is 36 years old?

_____

6. Twenty-four soccer players, four coaches, and one equipment manager are traveling to a game in minivans. The capacity each minivan is 6 people. How many people *(p)* are riding in the last minivan if the other minivans are filled to capacity?

_____

6-10 Name _____ Date _____

Remembering

Multiply.

1. $\begin{array}{r} 495 \\ \times \quad 7 \\ \hline \end{array}$

2. $\begin{array}{r} 126 \\ \times \quad 6 \\ \hline \end{array}$

3. $\begin{array}{r} 2{,}689 \\ \times \quad 3 \\ \hline \end{array}$

4. $\begin{array}{r} 3{,}249 \\ \times \quad 8 \\ \hline \end{array}$

5. $\begin{array}{r} 78 \\ \times 21 \\ \hline \end{array}$

6. $\begin{array}{r} 68 \\ \times 55 \\ \hline \end{array}$

7. $\begin{array}{r} 41 \\ \times 33 \\ \hline \end{array}$

8. $\begin{array}{r} 92 \\ \times 89 \\ \hline \end{array}$

Divide.

9. $0.7\overline{)49}$

10. $0.03\overline{)18}$

11. $0.4\overline{)0.8}$

12. $0.09\overline{)27}$

13. $0.5\overline{)172.5}$

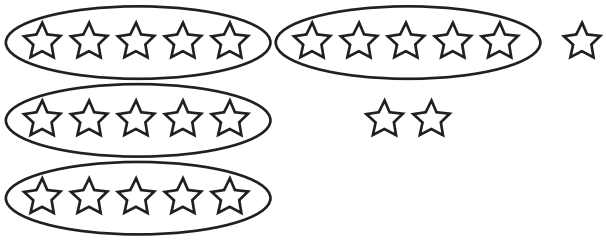
14. $0.06\overline{)8.4}$

Write an equation to solve the problem.

15. After a deposit of \$250, a withdrawal of \$312, and a deposit of \$15, the balance in a savings account is \$67.50. What was the balance (*b*) before the deposits and withdrawal?

_____

16. Stretch Your Thinking Write an equation that is represented by the following diagram.



_____

Name _____ Date _____

The data below represent typical weights for five different breeds of adult male dogs. Make a bar graph to display the data. Choose an appropriate scale based on the weights of the dogs.

Type of Dog	Adult Weight (in pounds)
Labrador retriever	65.25
German shepherd	$75\frac{1}{4}$
golden retriever	72.8
boxer	$70\frac{1}{2}$
standard poodle	64.3

Name _____ Date _____

Remembering

Compare. Write > (greater than) or < (less than).

1. 0.05 ◯ 0.5

2. 0.61 ◯ 0.6

3. 0.77 ◯ 0.7

4. 0.34 ◯ 0.43

5. 0.28 ◯ 0.29

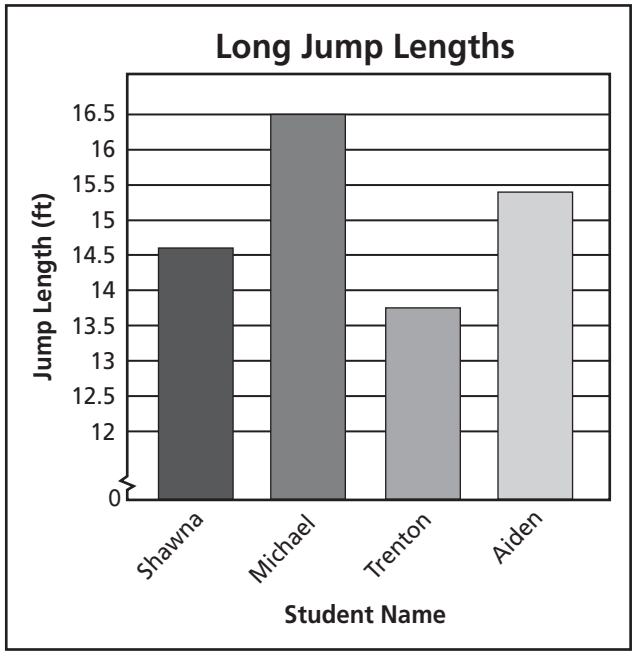
6. 0.981 ◯ 0.978

Solve the problem.

7. The charge for skating is \$6.35 for skate rental, $1\frac{1}{3}$ hours of skating at \$18 per hour, and an additional \$1 fee. What is the total cost (*c*) for skating?

_____

8. Stretch Your Thinking Make a table that lists the data from the bar graph.



7-1 **Homework**

Name _____ Date _____

1. Consider the expression $2\frac{1}{2} - (\frac{3}{4} + \frac{5}{8})$.

a. Which operation is done first, subtraction or addition?

_____

b. Write the computation in words.

_____

2. Consider the expression $4.5 + 6 \times 0.1$.

a. Which operation is done first, addition or multiplication?

_____

b. Write the computation in words.

_____

Write the computation in words.

3. $7 \div \frac{1}{7}$ _____

4. $8 - t$ _____

5. $3.6 \div 0.4 - 0.5$ _____

6. $5 \cdot (6 + 7)$ _____

Write an expression for the words.

7. Add $\frac{1}{6}$ and $\frac{4}{9}$. _____

8. Subtract the product of 5 and 11 from 100. _____

9. Divide 9 by 2 and then add 5.7. _____

10. Multiply 42 by the sum of 4 and r. _____

7-1 Name _____ Date _____

Remembering

Complete each division. Check your answer.

1. $3\overline{)1{,}957}$

2. $9\overline{)3{,}103}$

3. $7\overline{)5{,}768}$

Divide.

4. $69\overline{)4{,}899}$

5. $87\overline{)2{,}001}$

6. $52\overline{)3{,}432}$

7. $25\overline{)1{,}175}$

8. $38\overline{)2{,}660}$

9. $46\overline{)2{,}438}$

Write an equation to solve the problem. Draw a model if you need to.

10. Jesse drives $6\frac{3}{8}$ miles in a golf cart during a round of golf. Payton drives $7\frac{3}{4}$ miles. How much farther does Payton drive?

_____

11. Stretch Your Thinking Write the computation in words for an expression that uses all four operations (addition, subtraction, multiplication, and division). Then, write an expression for the words.

_____

_____

_____

7-2 **Homework**

Name _____ Date _____

1. Follow the Order of Operations to simplify $27 \div (3 \cdot 3) + 17$

Step 1 Perform operations inside parentheses. _____

Step 2 Multiply and divide from left to right. _____

Step 3 Add and subtract from left to right. _____

Simplify. Follow the Order of Operations.

2. $54 - 200 \div 4$

3. $0.8 \div (0.07 - 0.06)$

4. $3 \cdot 8 - 6 \div 2$

5. $(\frac{3}{8} + \frac{1}{4}) \cdot 16$

6. $64 + 46 - 21 + 29$

7. $72 \div (7 - 1) \cdot 3$

8. $0.8 - 0.5 \div 5 + 0.2$

9. $\frac{5}{6} - 4 \cdot \frac{1}{12}$

10. $5 \cdot 15 \div 3$

11. $32 \div (2.3 + 1.7) \cdot 3$

12. $(1\frac{1}{2} - \frac{3}{4}) \times \frac{1}{4}$

13. $(6.3 - 5.1) \cdot (0.7 + 0.3)$

14. $12 \div 0.1 + 12 \div 0.01$

15. $\frac{1}{2} \cdot \frac{1}{2} \div \frac{1}{2}$

16. $10 - 4 + 2 - 1$

7-2 Name _____ Date _____

Remembering

Solve.

1. $5\overline{)44.3}$ **2.** $2\overline{)125.65}$ **3.** $5\overline{)34.565}$

Write an equation to solve the problem. Draw a model if you need to.

4. The students of Turner Middle School are going on a field trip. There are 540 students attending. A bus can hold 45 students. How many buses are needed for the field trip?

_____

5. The area of a rectangular court is 433.37 square meters, and the length of the court is 28.7 meters. What is width of the court?

_____

Write the computation in words.

6. $5 \div \frac{1}{8}$ _____

7. $2.4 \div 0.6 + 0.2$ _____

8. Stretch Your Thinking Write step-by-step instructions for simplifying the following expression.

$10 \cdot [60 \div (11 + 4)] - 3$

_____

_____

_____

_____

7-3 **Homework**

Name _____ Date _____

Evaluate the expression.

1. $m \div 0.3$ for $m = 1.8$

2. $3\frac{1}{3} - x$ for $x = \frac{5}{6}$

3. $50 - n \div 2$ for $n = 30$

4. $x \cdot 1\frac{1}{2}$ for $x = 10$

5. $10 \cdot (20 + d)$ for $d = 30$

6. $120 \div (x \cdot 6)$ for $x = 2$

7. $a \cdot \frac{1}{3} + 3 \div \frac{1}{3}$ for $a = 3$

8. $(0.15 - t) \cdot 100$ for $t = 0.02$

9. $h \div 0.07$ for $h = 4.9$

10. Max bought a pair of jeans for $32 and three T-shirts for t dollars each.

a. Write an expression for the total amount Max spent.

_____

b. If each T-shirt cost $9, how much did Max spend?

_____

11. Luke is 4 years younger then Zoe. Mischa is half Luke's age. Let z be Zoe's age.

a. Write an expression for Luke's age.

_____

b. Write an expression for Mischa's age.

_____

c. If Zoe is 16 years old, how old are Luke and Mischa?

_____

7-3 Name _____ Date _____

Remembering

Solve.

1. $0.8\overline{)64}$

2. $0.008\overline{)72}$

3. $0.04\overline{)16}$

4. $0.5\overline{)80}$

5. $0.48\overline{)1{,}536}$

6. $0.76\overline{)1{,}596}$

Write a word problem for the equation. Draw a model to show the product.

7. $\frac{1}{2} \cdot \frac{4}{5} = x$

_____

_____

_____

_____

_____

Simplify. Follow the Order of Operations.

8. $\frac{3}{5} - 2 \cdot \frac{1}{10}$

9. $40 \div (6 - 1) \cdot 3$

10. $\left(\frac{1}{2} + \frac{3}{8}\right) \cdot 24$

11. $0.4 \div (0.09 - 0.07)$

12. $66 - 150 \div 10$

13. $6 \cdot 5 - 9 \div 3$

14. Stretch Your Thinking Write a two-operation expression that equals 31 when evaluated for $x = 5$.

_____

Name _____ Date _____

1. a. Write the first five terms of a numerical pattern that begins with 2 and then adds 3.

_____

b. Write an expression for the sixth term of the pattern.

_____

c. Write the sixth term.

_____

2. a. Write the first five terms of a pattern that begins with 5, and then adds 5. ___ ___ ___ ___ ___

b. Write the first five terms of a pattern that begins with 20, and then adds 20. ___ ___ ___ ___ ___

c. Circle the corresponding pairs of terms in the patterns. How does the top term compare to the bottom term?

_____

d. How does the bottom term compare to the top term?

_____

Complete the table and use it for Problems 3 and 4.

Cost of Music Downloads

Number of Songs	1	2	3	4	5
Cost in Dollars	$0.99	$1.98			

3. Describe a relationship shared by the corresponding terms.

_____

_____

4. What would be the cost of downloading 6 songs?

_____

7-4 Name _____ Date _____

Remembering

Solve.

Show your work.

1. Manny has 40 ounces of butter that he is cutting into 1.25-ounce slices. How many slices will he have?

_____

2. Tracy is running in a 5.25-kilometer race on Saturday. A marathon is approximately 42 kilometers. How many times as long as Tracy's race is a marathon?

_____

Write an equation to solve the problem. Use mental math or estimation to show that your answer is reasonable.

3. Each Saturday morning, Janie works 5 hours and earns $35.75. How much does Janie earn for each hour she works?

Equation: _____

Estimate: _____

_____

Evaluate the expression.

4. $120 \div (t \cdot 3)$ for $t = 4$

5. $m \cdot 2\frac{2}{3}$ for $m = 5$

6. $4 \cdot (2 + c)$ for $c = 8$

7. $7\frac{1}{2} - p$ for $p = \frac{5}{6}$

8. $60 - z \div 2$ for $z = 20$

9. $x \div 0.9$ for $x = 3.6$

10. Stretch Your Thinking Create your own numerical pattern. Write the starting number, the rule, and the first 5 terms in the pattern. Then write an expression for the tenth term.

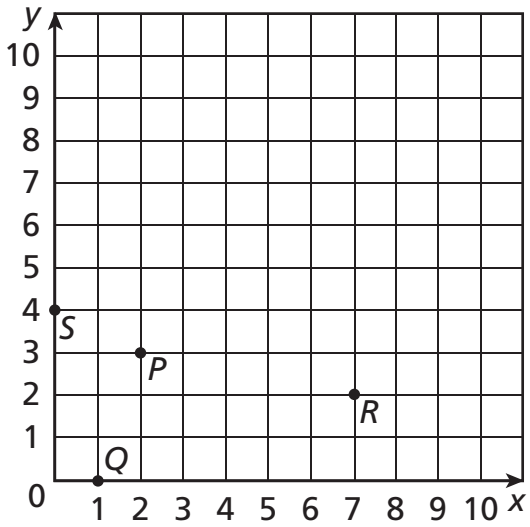
_____

_____

7-5 Homework

Name _____ Date _____

Use the coordinate plane below to answer the questions.



Write an ordered pair to represent the location of each point.

1. point *P* _____ **2.** point *Q* _____ **3.** point *R* _____ **4.** point *S* _____

Plot and label a point at each location.

5. point *W* at (3, 9) **6.** point *X* at (3, 5) **7.** point *Y* at (9, 5)

Solve.

8. Suppose points *W*, *X*, and *Y* represent three vertices of rectangle *WXYZ*. Where should point *Z* be plotted?

_____

Plot and label point *Z*. Then use a ruler to draw the rectangle.

9. What ordered pair represents the point at the center of the rectangle?

_____

10. Use subtraction to find the lengths of segments *WX* and *XY*. Show your work.

_____

7-5 Name _____ Date _____

Remembering

Divide.

1. $0.9\overline{)54}$

2. $0.09\overline{)27}$

3. $1.2\overline{)0.6}$

4. $0.06\overline{)48}$

5. $0.4\overline{)188.4}$

6. $0.08\overline{)56}$

7. **a.** Write the first five terms of a numerical pattern that begins with 5 and then adds 6.

_____

b. Write an expression for the sixth term of the pattern.

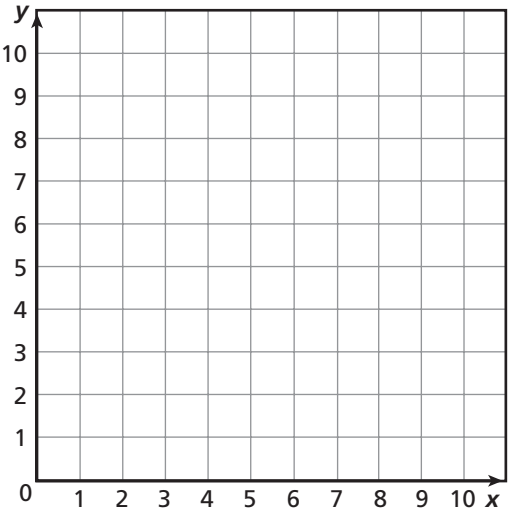
_____

c. Write the sixth term.

_____

8. **Stretch Your Thinking** List and graph four ordered pairs that are vertices of a rectangle with a perimeter of 16 units.

_____

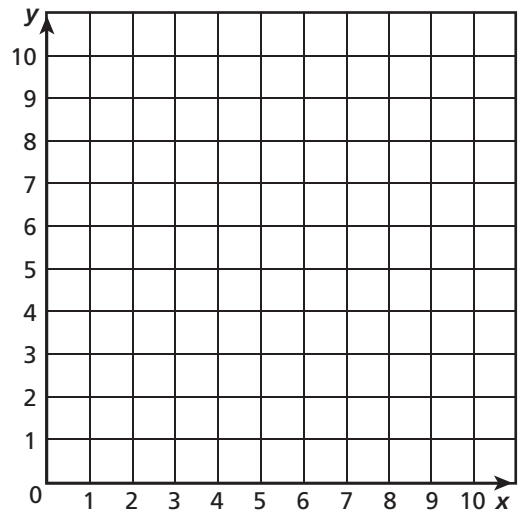


Name _____ Date _____

The *add 3* table below shows a numerical pattern in the left column and the result of adding 3 in the right column.

add 3	
0	3
1	
2	
3	
4	

(*x*, *y*)
(____, ____)
(____, ____)
(____, ____)
(____, ____)
(____, ____)



1. Complete the *add 3* table.

2. Complete the (*x, y*) table.

3. Each (*x, y*) pair of terms represents a point. Graph and connect the points.

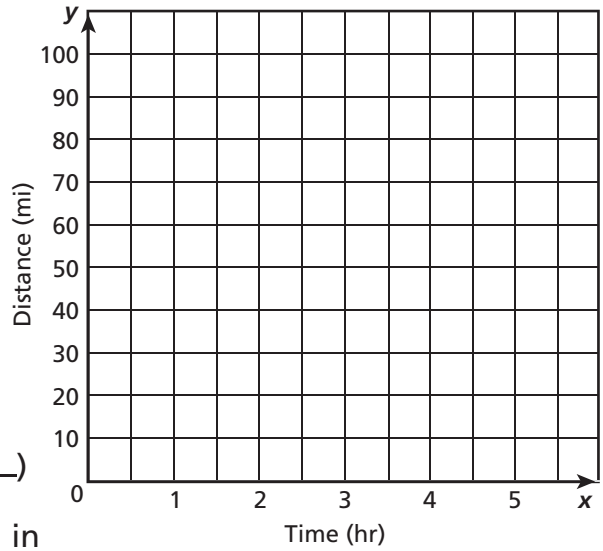
A freight train is traveling at a constant speed of 20 miles per hour.

4. Complete the table to show the distance the train will travel in 0, 1, 2, and 3 hours.

Time (hr)	0	1	2	3
Distance (mi)		20		

5. Write the ordered (*x, y*) pairs the data represent. Then graph and connect the points and extend the line.

(____, ____) (____, ____) (____, ____) (____, ____)



6. How far would you expect the train to travel in $2\frac{1}{2}$ hours? Explain your answer.

_____

_____

7-6 Name Date

Remembering

Multiply.

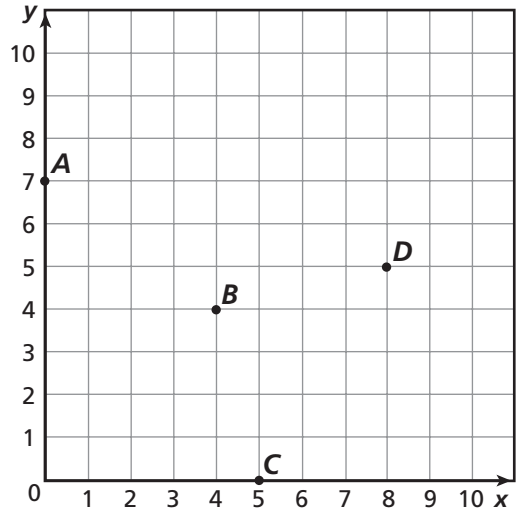
1. 76 × 4

2. 199 × 6

3. 7,907 × 2

4. 98 × 78

Use the coordinate plane below to answer the questions.



Write an ordered pair to represent the location of each point.

5. point *A* _____

6. point *B* _____

7. point *C* _____

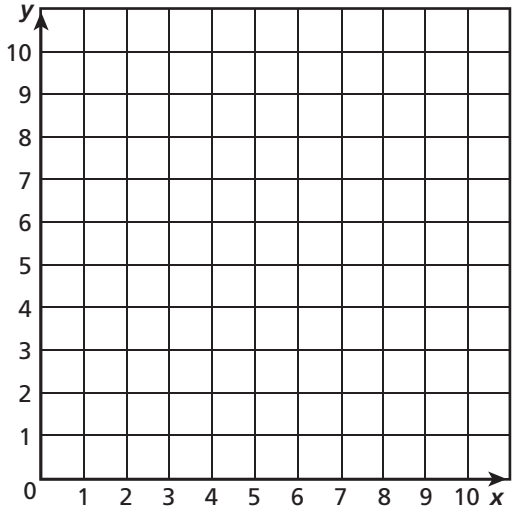
8. point *D* _____

9. Stretch Your Thinking Give the ordered pair for a point *E* so that when the points *B*, *D*, *E*, and *C* are connected (in that order), a square is formed. Then, find the area of square *BDEC*.

_____

Name _____ Date _____

1. On the coordinate plane below, plot and label points to design your own constellation. When you return to class, share your constellation with your class.



2. Write the name of your constellation.

_____

3. Write the order in which your points are to be connected.

_____

_____

_____

4. Explain how you can tell that two points will be on the same horizontal line just by looking at their coordinates.

_____

_____

5. Explain how you can tell that two points will be on the same vertical line just by looking at their coordinates.

_____

_____

7-7 Name Date

Remembering

Write and solve an equation to solve the problem.

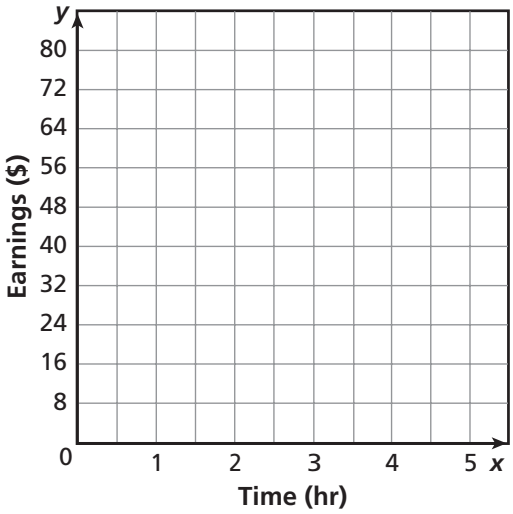
1. A group of 25 classmates visits an amusement park. When they arrive, $\frac{3}{5}$ of the students want to ride the fastest roller coaster first. How many students is this?

_____

Nicole makes $8 per hour working at a daycare center.

2. Complete the table.

Time (hr)	0	1	2	3
Earnings ($)		8		



3. Write the ordered (*x, y*) pairs the data represent. Then graph and connect the points and extend the line.

_____, _____, _____, _____

4. How much money would Nicole make in $2\frac{1}{2}$ hours? Explain your answer.

_____

_____

5. Stretch Your Thinking Which points listed lie on the line? Which points do not lie on the line? Explain.

(0, 5) (1, 5) (2, 4), (3, 6), (4, 3)

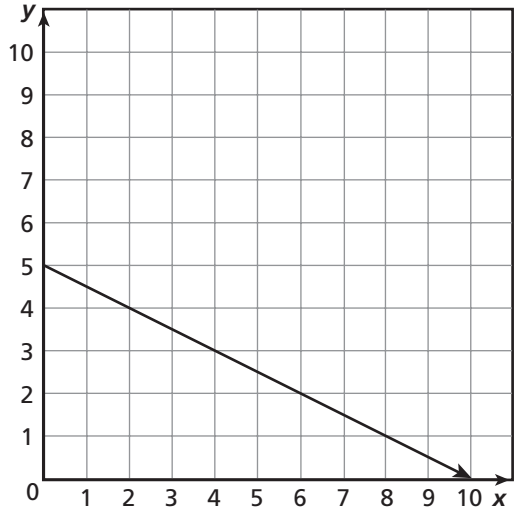
_____

_____

_____

_____

_____



8-1 **Homework**

Name _____ Date _____

Complete.

1. 75 cm = _____ m

2. 802 cm = _____ m

3. 251 km = 251,000 _____

4. 0.95 mm = _____ cm

5. 0.46 cm = _____ mm

6. 32 m = _____ mm

7. 58 mm = _____ m

8. 2,581 m = _____ km

9. 35.6 mm = _____ cm

10. 2.92 cm = 29.2 _____

Solve.

11. Jason ran 325 meters farther than Kim ran. Kim ran 4.2 kilometers. How many meters did Jason run? Estimate to check your answer.

_____

Estimate: _____

12. On each of 3 days, Derrick rode 6.45 km to school, 150 meters to the library, and then 500 meters back home. How many kilometers did he ride for the 3 days altogether?

_____

13. Lisa wants to frame her little brother's drawing as a gift to her mother. The rectangular drawing is 43.5 centimeters by 934 millimeters. How many centimeters of wood framing will she need?

_____

14. Marguerite is building a box from strips of wood. She needs 78 pieces of wood that are each 29 centimeters long. The wood comes in boards that are 6 meters long. How many boards will she need? Explain.

_____

_____

_____

8-1 Name Date

Remembering

Multiply.

1. 89 × 7

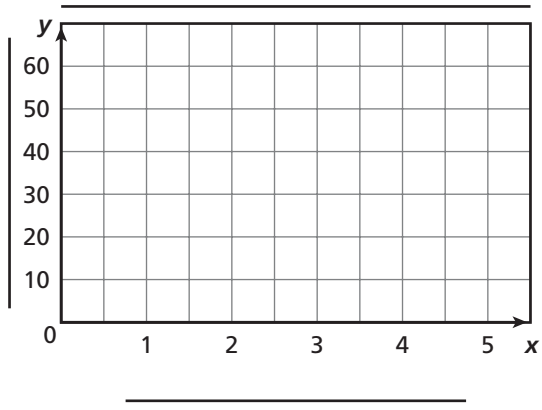
2. 221 × 3

3. 6,077 × 6

4. 77 × 65

Suppose a plant grows at the rate shown in the table. Use the table to complete Exercises 5 and 6.

Growth of a Plant	
Age (weeks)	Height (cm)
0	0
1	10
2	20
3	30
4	40



5. Write five ordered pairs that the data represent.

6. Graph the ordered pairs. What does each axis of the graph represent? Title the graph and label each axis.

7. Stretch Your Thinking Find the sum of 130 cm and 50 mm in meters. Show your work.

8-2

Homework

Name _____ Date _____

Complete.

1. 5,811 mL = _____ L

2. 297 L = _____ kL

3. 1.09 kL = 1,090 _____

4. 32,500 mL = _____ L

5. 53.1 L = _____ mL

6. 5.66 L = _____ mL

7. 2,848 mL = _____ L

8. 431 L = _____ kL

9. 0.56 L = _____ mL

10. 0.78 L = 780 _____

Solve.

11. Jennifer made 5 L of punch for her party. Her brother made another 750 mL. If they combine the two batches, how many 180 mL servings would they have? Would there be any punch left over? If so, how much?

_____

12. On an average day, a horse might drink 50 L, a sheep might drink 4 L, and a chicken might drink 200 mL. How much water would a farm with 3 horses, 15 sheep, and 12 chickens need for a day?

_____

13. Terrell has a water purifier for backpacking. It will purify 1 liter of water in 1 minute. How long would it take Terrell to purify enough water for 4 canteens that each hold 750 mL, and two that each hold 1.5 L?

_____

14. The Institute of Medicine determined that a man should drink 3 liters of fluids a day and a woman should drink 2.2 liters. Mr. Morrison drank 880 mL of water at breakfast and Mrs. Morrison drank 700 mL. How much more will they both need to drink combined to meet the recommended amounts for the day?

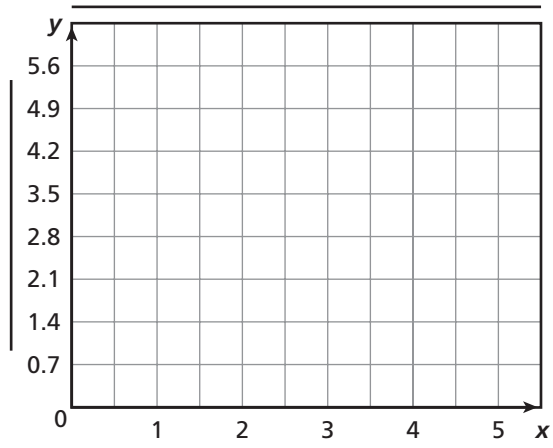
_____

8-2 Name _____ Date _____

Remembering

Suppose the cost of sugar changes at the rate shown in the table. Use the table to complete Exercises 1 and 2.

Cost of Sugar	
Weight (lb)	Cost ($)
0	$0
1	$1.40
2	$2.80
3	$4.20
4	$5.60



1. Write five ordered pairs that the data represent.

_____

2. Graph the ordered pairs. What does each axis of the graph represent? Title the graph and label each axis.

_____

_____

Complete the equation.

3. 14 m = _____ mm

4. 0.35 mm = _____ cm

5. 790 cm = _____ m

6. 0.88 cm = _____ mm

7. 782 km = 782,000 _____

8. 58 cm = _____ m

9. Stretch Your Thinking Shannon pours four different liquid ingredients into a bowl. The sum of the liquid ingredients is 8.53 liters. Two of her measurements are in liters and two of her measurements are in milliliters. Give an example of possible measurements for Shannon's four liquids.

_____

_____

8-3

Homework

Name _____ Date _____

Complete.

1. 973 mg = 0.973 _____

2. 0.058 g = 58 _____

3. 10.64 kg = _____ g

4. 4.001 kg = _____ mg

5. 29 g = 0.029 _____

6. 7 mg = _____ g

7. 3.7 g = _____ mg

8. 84 g = _____ kg

Solve.

9. The mass of substances left in a sample after the liquid is evaporated is called the *total dissolved solids*. Kim split up 2 liters of water into three different samples and boiled all the liquid away in each. The masses of solids left in the three samples were 2.025 grams, 457 mg, and 589 mg. Using the table at the right, how should Kim classify the water?

Total Dissolved Solids in 1 Liter of Solution	
fresh	$<$ 1,000 mg
brackish	1,000 to 10,000 mg
saline	$>$ 10,000 mg

_____

10. Jamal watched his older brother Robert lift weights. The bar alone had a mass of 20 kg. On the bar he had two 11.4 kg weights, two 4.5 kg weights, and four 450 g weights. What mass was Robert lifting?

_____

11. Barry bought 25 kg of fish-flavored cat food and 35 kg of chicken-flavored cat food for the cat rescue center. He is going to divide the cat food into packets of 300 grams. How many packets will he make?

_____

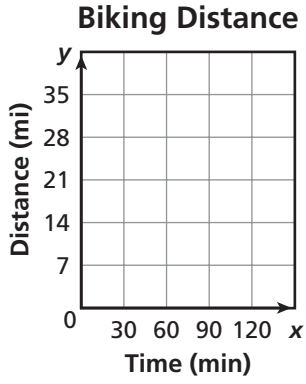
8-3 Name Date

Remembering

Greyson rides his bike at a constant rate. In 30 minutes, Greyson can bike 7 miles.

1. Complete the table to show the distance Greyson can ride in 0, 30, 60, and 90 minutes.

Time (min)	0	30	60	90
Distance (mi)		7		



2. Write the ordered (*x, y*) pairs the data represent. Then graph the points and extend the line.

(____, ____) (____, ____) (____, ____) (____, ____)

3. How far would you expect Greyson to ride in 105 minutes? Explain your answer.

_____

_____

Complete the equation.

4. 435 L = _____ kL

5. 6.71 L = _____ mL

6. 86,300 mL = _____ L

7. 109 L = _____ kL

8. 5,669 mL = _____ L

9. 30.8 L = _____ mL

10. 9.12 kL = 9,120 _____

11. 9,235 mL = _____ L

12. Stretch Your Thinking Write three measurements using grams and three measurements using milligrams that total 15.4 grams.

_____

_____

8-4

Homework

Name _____ Date _____

Complete.

1. 36 in. = _____ ft

2. 12 ft = _____ yd

3. 36 in. = _____ yd

4. _____ in. = 4 ft

5. _____ ft = 2 yd

6. _____ in. = 3 yd

7. _____ ft = 90 in.

8. _____ in. = $5\frac{1}{2}$ ft

9. 6 yd = _____ in.

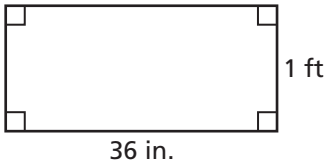
10. _____ yd = 432 in.

11. $1\frac{1}{4}$ yd = _____ ft

12. 90 ft = _____ yd

Find the perimeter of each figure in feet.

13.



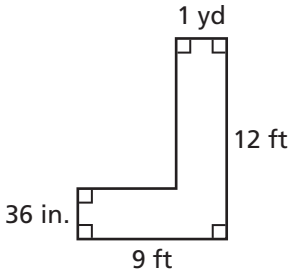
P = _____

14.

P = _____

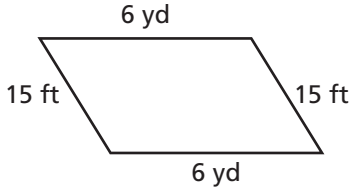
Find the perimeter of each figure in yards.

15.



P = _____

16.



P = _____

8-4 Name _____ Date _____

Remembering

Write an expression for the words.

1. Multiply 12 by the sum of 8 and t. _____

2. Divide 10 by 4 and then subtract 6.2. _____

3. Add the product of 7 and 10 to 80. _____

4. Subtract $\frac{1}{8}$ from $\frac{5}{6}$. _____

Simplify. Follow the Order of Operations.

5. $12 - 7 + 9 - 2$

6. $15 \div 0.3 + 6 \div 0.02$

7. $(2\frac{3}{8} - \frac{1}{4}) \times \frac{1}{5}$

8. $\frac{1}{6} \cdot \frac{1}{6} \div \frac{1}{6}$

9. $(7.2 - 3.3) \cdot (0.5 + 0.5)$

10. $36 \div (6.6 + 2.4) \cdot 4$

Complete.

11. 5 mg = _____ g

12. 13.45 kg = _____ g

13. 66 g = 0.066 _____

14. 0.021 g = 21 _____

15. 5.003 kg = _____ mg

16. 782 mg = 0.782 _____

17. Stretch Your Thinking Draw a figure composed of three different rectangles that has a perimeter of 140 yards. Use measurements in yards and feet to label the sides of your figure.

_____

8-5

Homework

Name _____ Date _____

Complete.

1. 2 pt = _____ qt

2. 4 qt = _____ gal

3. 2 c = _____ pt

4. 3 qt = _____ pt

5. 1 qt = _____ c

6. 5 gal = _____ qt

7. _____ qt = 52 c

8. _____ qt = 46 pt

9. 112 c = _____ gal

10. $11\frac{1}{2}$ gal = _____ qt

11. 112 c = _____ pt

12. 75 pt = _____ qt

Write a fraction.

13. What fraction of 1 gallon is 1 quart?

_____

14. What fraction of 1 quart is 3 cups?

_____

15. What fraction of 1 gallon is 5 cups?

_____

16. What fraction of 1 pint is 1 cup?

_____

Solve. *Show your work.*

17. Cesar bought 2 bottles of juice that each hold 2 quarts and another bottle that holds $1\frac{1}{2}$ gallons of juice. How many quarts of juice did he buy?

_____

18. Samantha saw two bottles of ketchup at the store for the same price. One bottle contained 4 pints of ketchup, and the other contained 1.25 quarts of ketchup. Which bottle was the better bargain?

_____

19. A pitcher is full of lemonade. Which unit of liquid volume best describes the amount of lemonade in the pitcher? Explain.

_____

_____

_____

_____

8-5 Name _____ Date _____

Remembering

Divide.

1. $5\overline{)2,245}$

2. $6\overline{)3,277}$

3. $9\overline{)4,558}$

4. $56\overline{)1,344}$

5. $47\overline{)3,619}$

6. $23\overline{)2,047}$

7. $91\overline{)4,315}$

8. $62\overline{)4,030}$

9. $18\overline{)1,241}$

Complete.

10. 24 in. = _____ ft

11. 27 ft = _____ yd

12. 3 ft = _____ in.

13. _____ in. = 5 yd

14. _____ yd = 18 ft

15. _____ ft = 84 in.

16. 24 yd = _____ ft

17. 8 ft = _____ in.

18. _____ ft = 84 yd

19. Stretch Your Thinking What fraction of a gallon is 3 pints?

_____

8-6

Homework

Name _____ Date _____

Complete.

1. 1 lb = _____ oz

2. 2 T = _____ lb

3. 32 oz = _____ lb

4. 1,000 lb = _____ T

5. 4 lb = _____ oz

6. 10,000 lb = _____ T

Write a mixed number in simplest form to represent the number of pounds equivalent to each number of ounces.

7. 40 oz = _____ lb

8. 50 oz = _____ lb

9. 44 oz = _____ lb

10. 68 oz = _____ lb

11. 22 oz = _____ lb

12. 94 oz = _____ lb

Solve. *Show your work.*

13. At a garden center, grass seed sells for $8 per pound. Kalil spent $10 on grass seed. What amount of seed did he buy?

_____

14. Two boxes of tea weigh 3 oz. The Tea Time Tasty Tea Company packs 112 boxes in a case of tea. How many pounds does each case of tea weigh?

_____

15. Juli uses 12 ounces of cheese in her potato soup recipe. Her recipe yields 8 servings. If Juli needs enough for 20 servings, how many pounds of cheese will she need?

_____

16. At a grocery store, salted peanuts in the shell cost 30¢ per ounce. Is $5.00 enough money to buy 1 pound of peanuts? If it is, what amount of money will be left over?

_____

8-6 Name _____ Date _____

Remembering

Complete the pattern.

1. $5 \times 10^1 = 5 \times 10 =$ _____

$5 \times 10^2 = 5 \times 100 =$ _____

$5 \times 10^3 = 5 \times 1{,}000 =$ _____

$5 \times 10^4 = 5 \times 10{,}000 =$ _____

2. $45 \times 10^1 =$ _____ $= 450$

$45 \times 10^2 =$ _____ $= 4{,}500$

$45 \times 10^3 =$ _____ $= 45{,}000$

$45 \times 10^4 =$ _____ $= 450{,}000$

3. $17 \times 10^1 = 17 \times 10 =$ _____

$17 \times 10^2 = 17 \times 100 =$ _____

$17 \times 10^3 = 17 \times 1{,}000 =$ _____

$17 \times 10^4 = 17 \times 10{,}000 =$ _____

4. $342 \times 10^1 =$ _____ $= 3{,}420$

$342 \times 10^2 = 342 \times 100 =$ _____

$342 \times 10^3 =$ _____ $= 342{,}000$

$342 \times 10^4 = 342 \times 10{,}000 =$ _____

Solve.

5. 8 qt = _____ pt

6. 2 qt = _____ c

7. _____ c = 2 pt

8. 80 cups = _____ gal

9. $9\frac{1}{2}$ gal = _____ qt

10. 80 cups = _____ pt

11. _____ qt = 24 cups

12. _____ pt = 32 qt

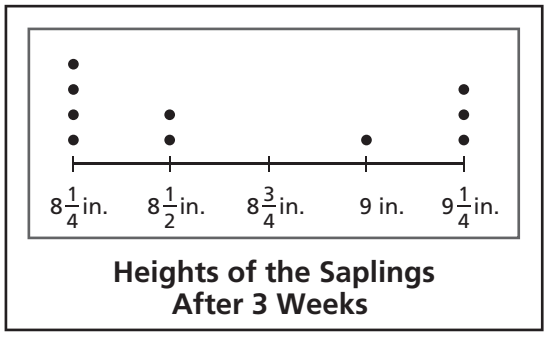
13. _____ qt = 25 pt

14. Stretch Your Thinking Divide 15 pounds of rice into four unequal measures using ounces.

_____

Name _____ Date _____

1. Perry is growing maple saplings. After 3 weeks, he measured the saplings to the nearest quarter inch and drew this line plot with the data. Use the line plot to answer questions about the saplings.



Heights of the Saplings After 3 Weeks

a. How many saplings were there?

_____

b. How many saplings were less than 9 inches tall?

_____

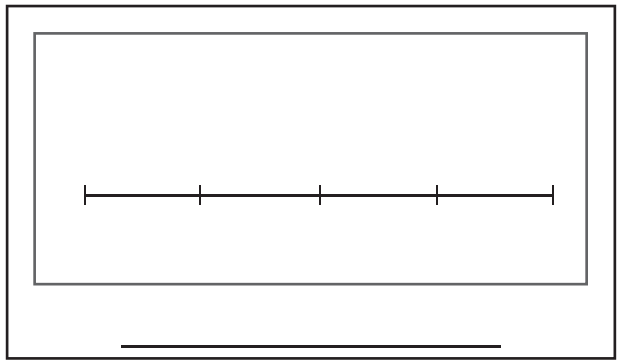
c. What is the combined height of all the saplings?

_____

2. As a volunteer at the animal shelter, Uma weighed all the puppies. She made a list of the weights as she weighed them. The puppies weights were $3\frac{3}{4}$ lb, $4\frac{1}{4}$ lb, $3\frac{1}{2}$ lb, $3\frac{3}{4}$ lb, $3\frac{1}{4}$ lb, $3\frac{3}{4}$ lb, $3\frac{1}{2}$ lb, $4\frac{1}{4}$ lb, and $3\frac{3}{4}$ lb.

a. Draw a line plot of the puppies' weights.

b. Use the line plot to write and answer a question about the data.



_____

_____

_____

_____

8-7 Name _____ Date _____

Remembering

Write an equation to solve each problem. *Show your work.*

1. At the school bookstore, Harrison purchases 3 notebooks for $2.50 each, 10 pens for $0.35 each, and 5 mechanical pencils for $0.89 each. By what amount (*a*) is the cost of the mechanical pencils greater than the cost of the pens?

_____

2. This week an employee is scheduled to work 6 hours each day Monday through Friday, and $3\frac{1}{2}$ hours on Saturday morning. If the employee's goal is to work 40 hours, how many additional hours (*h*) must he work?

_____

Complete.

3. 6 T = _____ lb

4. 3 lb = _____ oz

5. _____ oz = 5 lb

6. 5,000 lb = _____ T

7. 8 lb = _____ oz

8. 20,000 lb = _____ T

Write a mixed number in simplest form to represent the number of pounds equivalent to each number of ounces.

9. 66 oz = _____ lb

10. 52 oz = _____ lb

11. 24 oz = _____ lb

12. 76 oz = _____ lb

13. 82 oz = _____ lb

14. 46 oz = _____ lb

15. Stretch Your Thinking List three different real world situations in which a line plot would be the best choice to organize and display the data.

_____

_____

_____

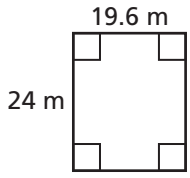
_____

8-8 **Homework**

Name _____ Date _____

Find the perimeter and the area of the rectangle.

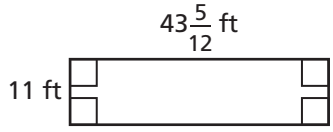
1.



$P =$ _____

$A =$ _____

2.

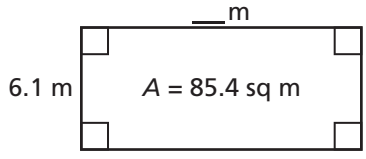


$P =$ _____

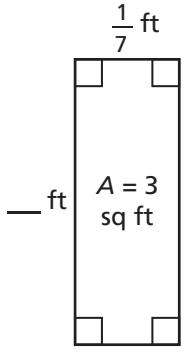
$A =$ _____

Find the side length of the rectangle.

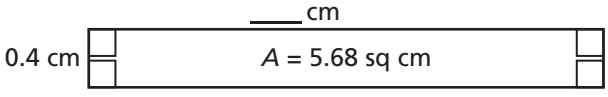
3.



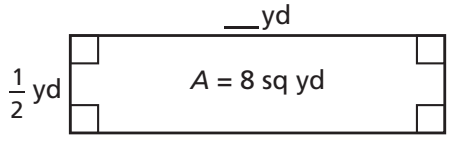
4.



5.



6.



Solve.

7. Gerard ran out of tile for his patio. The width of the remaining area is $2\frac{2}{9}$ feet. The length of the remaining area is 7 feet. How much does Gerard have left to tile?

_____

8. Kyra is building a dollhouse. The carpet for the bedroom is 27 square inches. The length of the bedroom is 6 inches. How long is the width?

_____

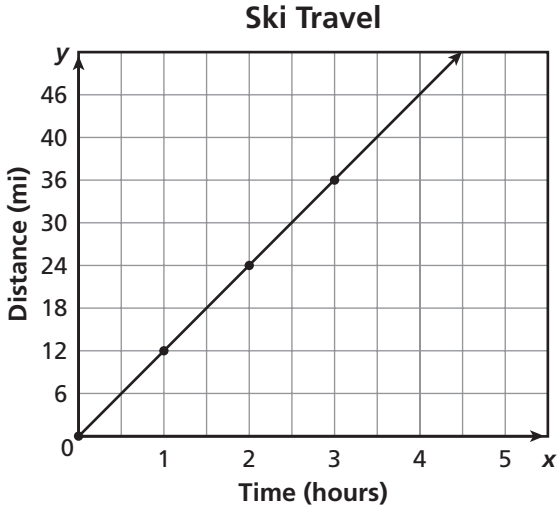
8-8 Name Date

Remembering

The graph shown represents a skier traveling at a constant speed.

1. The points on the graph represent four ordered (*x, y*) pairs. Write the ordered pairs.

(____, ____) (____, ____) (____, ____) (____, ____)



2. Complete the table to show the relationship that time and distance share.

Time (hours)	0			
Distance (miles)	0			

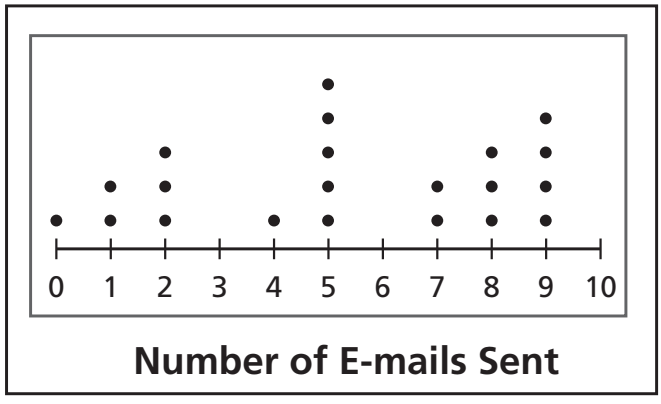
3. At what constant rate of speed was the skier traveling? Explain how you know.

_____

_____

_____

4. Dayna surveyed her classmates to find out how many e-mails they send per day. Then, she drew this line plot with the data. Use the line plot to answer questions about the e-mails sent.



a. How many classmates were surveyed?

_____

b. How many classmates sent fewer than 5 e-mails?

_____

c. How many classmates sent at least 7 e-mails?

_____

5. Stretch Your Thinking Find the fractional side lengths of a rectangle that has a perimeter of $64\frac{5}{6}$ inches. Then find the area of the rectangle.

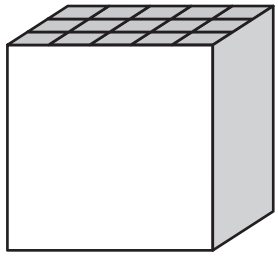
_____

8-9

Homework

Name _____ Date _____

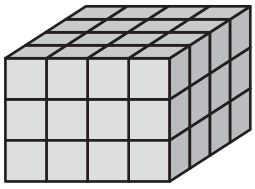
1. Alison had a box in the shape of a cube. She decided to use centimeter cubes to find the volume of the box. It took 75 centimeter cubes to fill the box with no gaps. What was the volume of the box?



_____

Find the number of unit cubes and the volume.

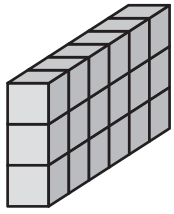
2.



Number of unit cubes: _____

Volume: _____

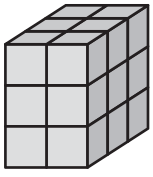
3.



Number of unit cubes: _____

Volume: _____

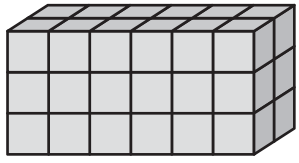
4.



Number of unit cubes: _____

Volume: _____

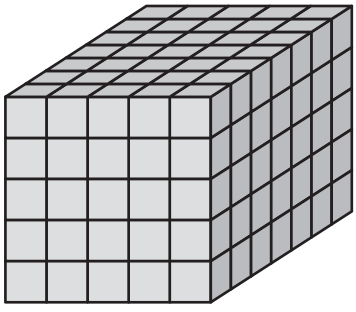
5.



Number of unit cubes: _____

Volume: _____

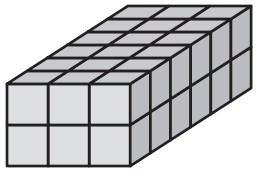
6.



Number of unit cubes: _____

Volume: _____

7.



Number of unit cubes: _____

Volume: _____

Name _____ Date _____

Remembering

Write the computation in words.

1. $4.5 \div 0.5 + 0.1$ _____

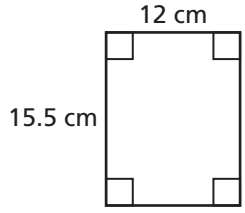
2. $6 \div \frac{1}{6}$ _____

3. $4 \cdot (5 - 2)$ _____

4. $11 - c$ _____

Find the perimeter and the area of the rectangle.

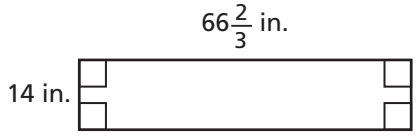
5.



$P =$ _____

$A =$ _____

6.



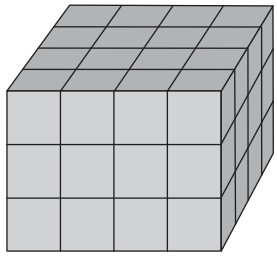
$P =$ _____

$A =$ _____

7. Stretch Your Thinking Draw a sketch to show two figures that have the same number of unit cubes that look different from each other.

Name _____ Date _____

Use the prism on the right to answer the questions.



1. How many cubes are in 1 layer? _____

2. How many layers are in the prism? _____

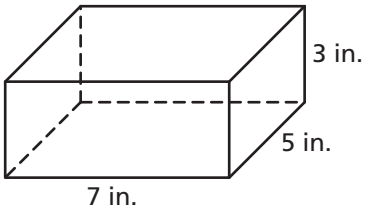
3. Write a multiplication expression for the volume.

_____

4. What is the volume of the prism? _____

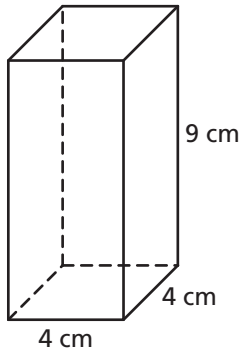
Find the volume.

5.



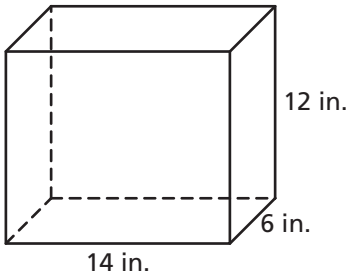
Volume: _____

6.



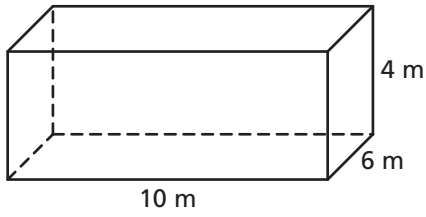
Volume: _____

7.



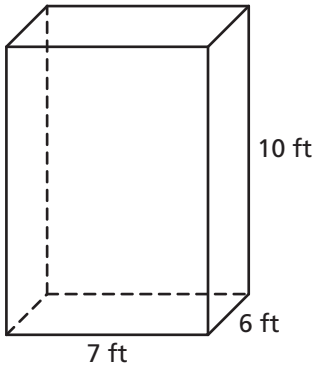
Volume: _____

8.



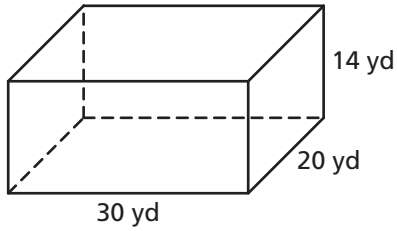
Volume: _____

9.



Volume: _____

10.



Volume: _____

Name _____ Date _____

Remembering

Solve. Follow the Order of Operations.

1. $21 - 6 + 3 - 6$

2. $(7.9 - 5.1) \cdot (0.2 + 0.8)$

3. $6 \cdot 10 \div 5$

4. $\frac{1}{5} \cdot \frac{1}{5} \div \frac{1}{5}$

5. $(2\frac{3}{8} - \frac{1}{4}) \times \frac{1}{8}$

6. $\frac{5}{8} - 3 \cdot \frac{1}{16}$

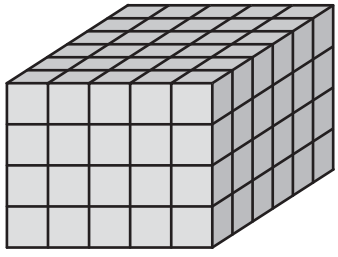
7. $16 \div 0.2 + 15 \div 0.03$

8. $64 \div (6.6 + 1.4) \cdot 2$

9. $0.7 - 0.9 \div 3 + 0.6$

Find the number of unit cubes and the volume.

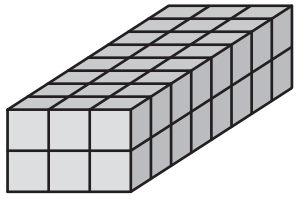
10.



Number of unit cubes: _____

Volume: _____

11.



Number of unit cubes: _____

Volume: _____

12. Stretch Your Thinking I'm a figure with six layers. Each of my layers is the same. My bottom layer has a perimeter of 28 units, and my volume is between 200 and 300 cubic units. What is my volume?

_____

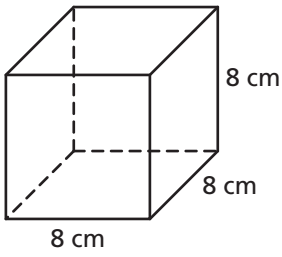
8-11

Homework

Name _____ Date _____

Write a numerical expression for the volume. Then calculate the volume.

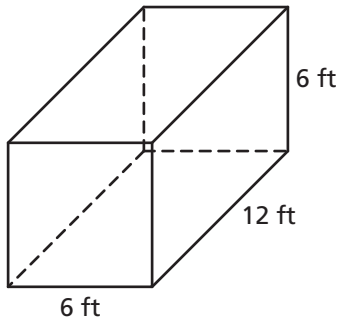
1.



Expression: _____

Volume: _____

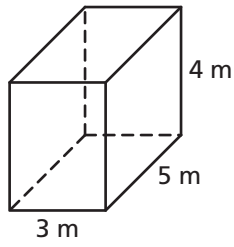
2.



Expression: _____

Volume: _____

3.



Expression: _____

Volume: _____

Find the unknown dimension or volume of each rectangular prism.

4. $V =$ _____

$l = 4$ cm

$w = 4$ cm

$h = 11$ cm

5. $V = 168$ cu yd

$l =$ _____

$w = 7$ yd

$h = 3$ yd

6. $V = 90$ cu in.

$l = 9$ in.

$w =$ _____

$h = 5$ in.

Write an equation. Then solve.

7. Pattie built a rectangular prism with cubes. The base of her prism has 12 centimeter cubes. If her prism was built with 108 centimeter cubes, how many layers does her prism have?

_____

8. Isabella cares for an aquarium that is 6 feet long and has a height of 4 feet. The aquarium needs 72 cubic feet of water to be completely filled. What is the width of the aquarium?

_____

9. Ray's aquarium is 20 inches long, 20 inches wide, and has a height of 15 inches. Randal's aquarium is 40 inches long, 12 inches wide, and has a height of 12 inches. Whose aquarium has a greater volume? By how much?

_____

8-11 Name _____ Date _____

Remembering

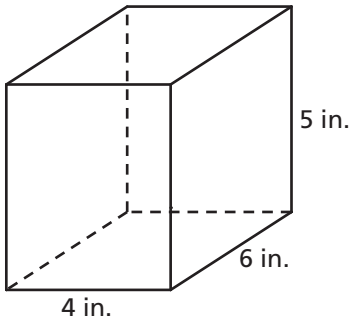
Add or subtract.

1. $0.45 + 0.77 =$ _____ **2.** $0.4 + 0.08 =$ _____ **3.** $6.9 - 3.44 =$ _____

4. $7 - 2.2 =$ _____ **5.** $0.66 + 0.96 =$ _____ **6.** $5.7 - 0.9 =$ _____

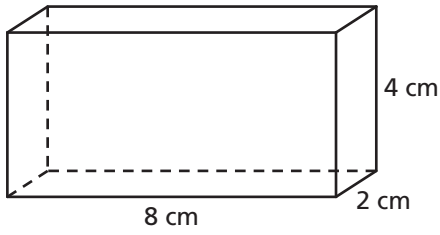
Find the volume.

7.



Volume: _____

8.

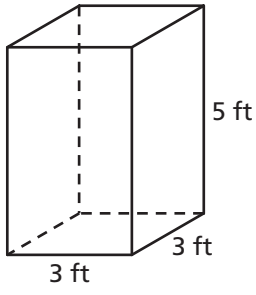


Volume: _____

9. Stretch Your Thinking Give the dimensions of a crate that could be used to ship 6 of the boxes below. Allow for some air space between the boxes so they can fit in the crate.

_____

_____



Name _____ Date _____

For each question, write whether you would measure for length, area, or volume.

1. the amount of space inside a moving van _____
2. the number of tiles needed to cover a bathroom floor _____
3. the distance from a porch to a tree _____
4. the amount of water a tank holds _____
5. the height of a flagpole _____

Solve.

6. A box is 5 inches long, 4 inches wide, and 1 inch deep. How much space is inside the box?

   _____

7. Aponi built a toy chest for her niece. It has a volume of 12 cubic feet. The chest is 3 feet long and 2 feet wide. How deep is it?

   _____

8. The rug in Alan's room has an area of 18 square feet. He is planning to buy another rug that is twice as long and twice as wide. What is the area of the new rug?

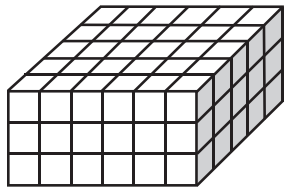
   _____

9. Each drawer in Monique's nightstand has a volume of 6 cubic decimeters. Each drawer in her dresser is twice as long, twice as wide, and twice as deep. What is the volume of one of Monique's dresser drawers?

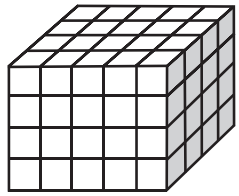
   _____

10. Fong and Daphne built these structures. Who used more cubes? How many more?

    _____



Fong



Daphne

8-12 Name _____ Date _____

Remembering

Solve.

1. 3.8 × 5.4

2. 0.30 × 6.7

3. 3.3 × 0.78

4. 0.04 × 7.3

5. 0.6 × 5.14

6. 8.3 × 2.8

Find the unknown dimension or volume of each rectangular prism.

7. $V =$ _____
$l = 7$ cm
$w = 4$ cm
$h = 9$ cm

8. $V = 200$ cu yd
$l =$ _____
$w = 5$ yd
$h = 5$ yd

9. $V = 160$ cu in.
$l = 10$ in.
$w =$ _____
$h = 4$ in.

10. $V =$ _____
$l = 10$ cm
$w = 8$ cm
$h = 6$ cm

11. $V = 297$ cu m
$l =$ _____
$w = 9$ m
$h = 3$ m

12. $V = 126$ cu in.
$l = 9$ in.
$w =$ _____
$h = 7$ in.

13. Stretch Your Thinking Give one real world example for measuring each of the following: perimeter, area, volume.

_____

_____

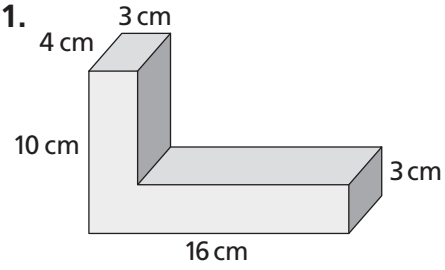
_____

_____

Name _____ Date _____

Find the volume of each composite solid figure.

1.



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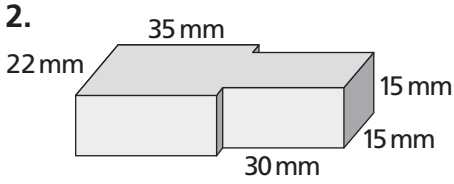
2.



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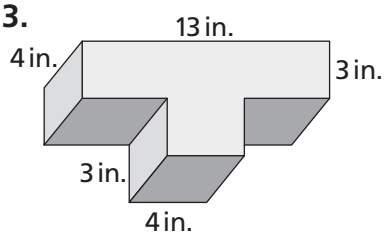
3.



_____

4. The exterior of a refrigerator is shaped like a rectangular prism, and measures $2\frac{2}{3}$ feet wide by $5\frac{1}{2}$ feet high by $2\frac{1}{2}$ feet deep. What amount of space does the refrigerator take up?

_____

5. In the space below, draw a composite solid of your own design that is made up of two prisms. Write the dimensions of your design, and then calculate its volume.

_____

8-13 Name Date

Remembering

Divide

1. $0.7\overline{)49}$

2. $0.05\overline{)50}$

3. $0.8\overline{)0.64}$

4. $0.06\overline{)36}$

5. $0.3\overline{)939.6}$

6. $0.06\overline{)27.3}$

Solve.

7. A fish tank is 20 feet long, 12 feet wide, and 10 feet deep. What is the volume of the fish tank?

_____

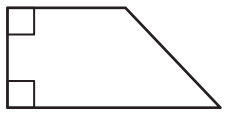
8. Stretch Your Thinking Draw a composite solid in the space below using two different rectangular prisms. Label the length and width using fractions of units. The figures do not need to be to scale. Find the volume of the figure.

_____

Name _____ Date _____

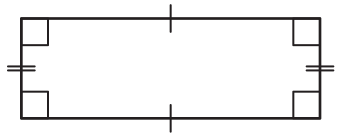
Circle all the names that describe the shape.

1.



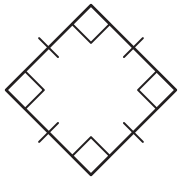
quadrilateral trapezoid
parallelogram rhombus
rectangle square

2.



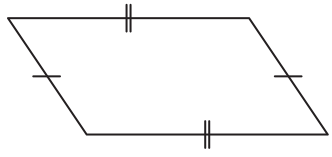
quadrilateral trapezoid
parallelogram rhombus
rectangle square

3.



quadrilateral trapezoid
parallelogram rhombus
rectangle square

4.



quadrilateral trapezoid
parallelogram rhombus
rectangle square

Sketch a shape that fits the description, if possible.

5. a trapezoid with two right angles

6. a rhombus with a line of symmetry

7. a parallelogram with a right angle that is not a rectangle

8. a rectangle with opposite sides that are not congruent

8-14 Name _____ Date _____

Remembering

Add or subtract.

1. $\begin{array}{r} \frac{5}{6} \\ -\frac{1}{3} \\ \hline \end{array}$

2. $\begin{array}{r} \frac{3}{4} \\ -\frac{5}{8} \\ \hline \end{array}$

3. $\begin{array}{r} \frac{3}{16} \\ -\frac{1}{8} \\ \hline \end{array}$

4. $\begin{array}{r} \frac{5}{9} \\ +\frac{1}{3} \\ \hline \end{array}$

5. $\begin{array}{r} \frac{3}{5} \\ +\frac{1}{4} \\ \hline \end{array}$

6. $\begin{array}{r} \frac{1}{6} \\ +\frac{2}{3} \\ \hline \end{array}$

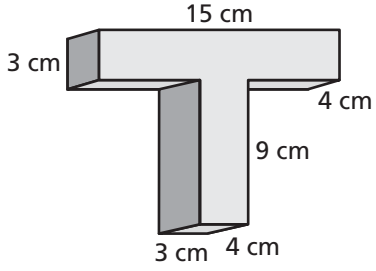
7. $\begin{array}{r} 6 \\ -3\frac{2}{5} \\ \hline \end{array}$

8. $\begin{array}{r} 1\frac{4}{9} \\ +4\frac{2}{3} \\ \hline \end{array}$

9. $\begin{array}{r} 6\frac{4}{5} \\ -2\frac{1}{10} \\ \hline \end{array}$

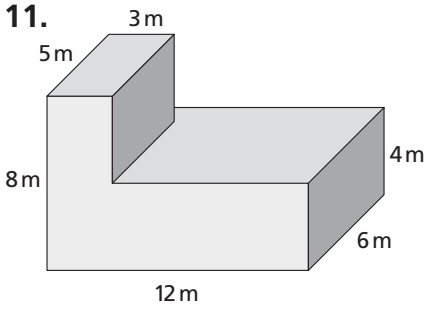
Find the volume of each composite solid.

10.



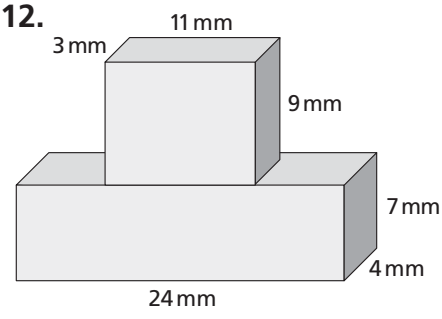
_____

11.



_____

12.



_____

13. **Stretch Your Thinking** Explain why a square is always a rectangle but a rectangle is not always a square.

_____

_____

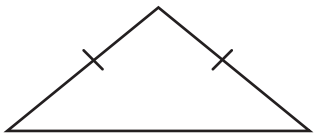
_____

_____

Name _____ Date _____

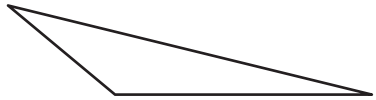
Circle all the names that describe the shape.

1.



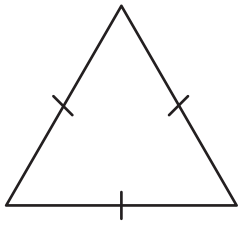
acute scalene
right isosceles
obtuse equilateral

2.



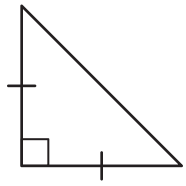
acute scalene
right isosceles
obtuse equilateral

3.



acute scalene
right isosceles
obtuse equilateral

4.



acute scalene
right isosceles
obtuse equilateral

Sketch a shape that fits the description, if possible.

5. a triangle with two obtuse angles

6. a right scalene triangle

7. an acute triangle that is not equilateral

8. a scalene triangle with a line of symmetry

8-15 Name _____ Date _____

Remembering

Solve.

1. $\frac{1}{5} \div 6 =$ _____

2. $7 \div \frac{1}{4} =$ _____

3. $\frac{6}{7} \cdot \frac{1}{5} =$ _____

4. $\frac{1}{10} \div 5 =$ _____

5. $4 \cdot \frac{1}{5} =$ _____

6. $\frac{1}{3} \cdot 14 =$ _____

Find each product by first rewriting each mixed number as a fraction.

7. $\frac{3}{5} \cdot 1\frac{1}{6} =$ _____

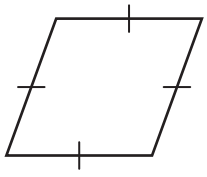
8. $2\frac{2}{3} \cdot 6 =$ _____

9. $4\frac{5}{6} \cdot 2\frac{1}{5} =$ _____

10. $4\frac{1}{4} \cdot \frac{3}{8} =$ _____

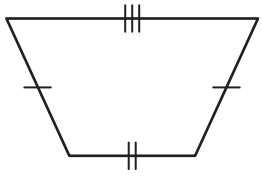
Circle all the names that describe the shape.

11.



quadrilateral trapezoid
parallelogram rhombus
rectangle square

12.



quadrilateral trapezoid
parallelogram rhombus
rectangle square

13. Stretch Your Thinking The sum of the lengths of any two sides of a triangle must be greater than the length of the third side. List three side lengths that will form a triangle. Use a ruler and draw the triangle.

_____

8-16

Homework

Name Date

Draw a shape that fits the description. Mark all congruent segments and right angles.

1. an open shape made up of one or more curves

2. a concave quadrilateral with an acute angle and exactly two congruent sides

3. a closed shape that is not a polygon made entirely of segments

4. a convex pentagon with two parallel sides and two perpendicular sides

5. a concave hexagon with two pairs of congruent sides

6. a quadrilateral with four congruent sides that is not regular

8-16 Name Date

Remembering

Simplify. Follow the Order of Operations.

1. $61 - 300 \div 6$

2. $0.8 \div (0.09 - 0.07)$

3. $4 \cdot 9 - 12 \div 3$

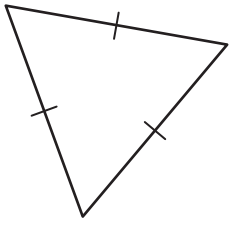
4. $(\frac{5}{12} + \frac{3}{4}) \cdot 12$

5. $44 + 29 - 13 + 34$

6. $100 \div (6 - 2) \cdot 5$

Circle all the names that describe the shape.

7.

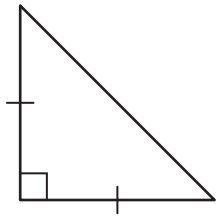


acute scalene

right isosceles

obtuse equilateral

8.



acute scalene

right isosceles

obtuse equilateral

9. Stretch Your Thinking Write a description of a two-dimensional shape and then draw the shape.

8-17

Homework

Name _____ **Date** _____

Solve.

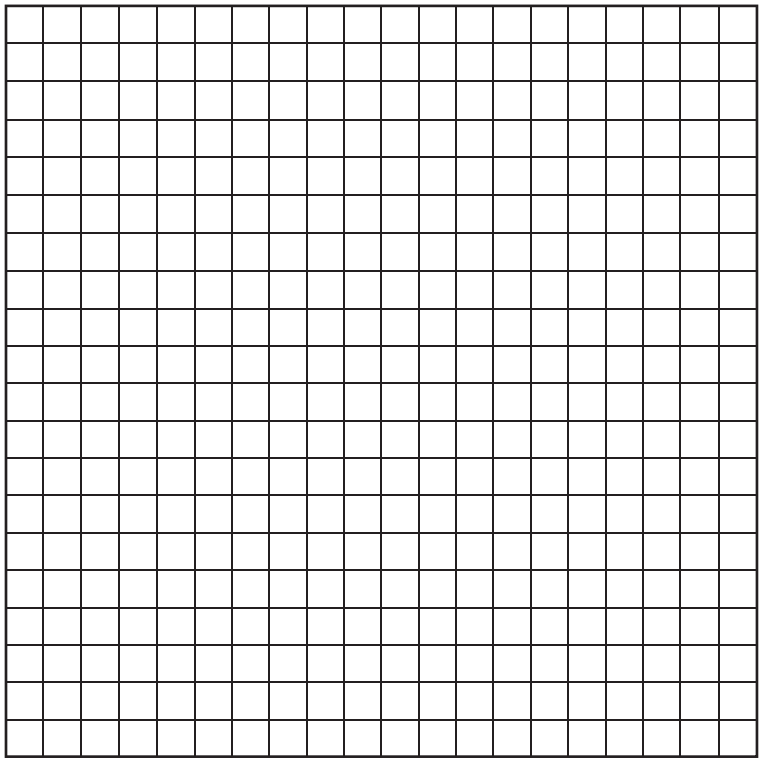
1. On the grid below, draw and label an aquarium shaped like a rectangular prism with a volume of 8,000 cubic inches. (Hint: A cube is a rectangular prism, and $2 \times 2 \times 2 = 8$.)

2. Calculate the perimeter of the top of your aquarium. Then calculate the area of its base.

$P =$ _____

$A =$ _____

3. The rectangular prism you drew for Problem 1 is not the only rectangular prism that has a volume of 8,000 cubic inches. Other prisms are possible. On the grid below, use a new color and draw a different rectangular prism that has a volume of 8,000 cubic inches.



8-17 Name _____ Date _____

Remembering

Complete the pattern.

1. $22 \times 10^1 = 22 \times 10 =$ _____

$22 \times 10^2 = 22 \times 100 =$ _____

$22 \times 10^3 = 22 \times 1{,}000 =$ _____

$22 \times 10^4 = 22 \times 10{,}000 =$ _____

2. $412 \times 10^1 =$ _____ $= 4{,}120$

$412 \times 10^2 = 412 \times 100 =$ _____

$412 \times 10^3 =$ _____ $= 412{,}000$

$412 \times 10^4 = 412 \times 10{,}000 =$ _____

3. $56 \times 10^1 =$ _____ $= 560$

$56 \times 10^2 =$ _____ $= 5{,}600$

$56 \times 10^3 =$ _____ $= 56{,}000$

$56 \times 10^4 =$ _____ $= 560{,}000$

4. $8 \times 10^1 = 8 \times 10 =$ _____

$8 \times 10^2 = 8 \times 100 =$ _____

$8 \times 10^3 = 8 \times 1{,}000 =$ _____

$8 \times 10^4 = 8 \times 10{,}000 =$ _____

Draw a shape that fits the description. Mark all congruent segments and right angles.

5. a triangle with a right angle and exactly two congruent sides

6. a concave octagon with all sides congruent

7. Stretch Your Thinking List the dimensions of two different rectangular prisms in which each has a volume of 6,600 cubic centimeters.

_____

_____