

**Woodward Academy
Rising 6th
Grade
Math Packet**

Name: _____

Please put the pages in order and staple before turning in the packet to you math teacher on the first Friday after the beginning of school.

You will take an assessment over the contents of this packet on the first Tuesday after the packet is due.

All work should be shown on separate paper, clearly labeled with problem numbers. All final answers should be written on the actual worksheets.

Addition /Subtraction– Show all work.

1. $827 + 2098 = \underline{\hspace{2cm}}$

2. $32.45 + 606 = \underline{\hspace{2cm}}$

3. $0.1414 + 77.4 = \underline{\hspace{2cm}}$

4. $7.71 + 9402 = \underline{\hspace{2cm}}$

5. $4165 + 2.4179 = \underline{\hspace{2cm}}$

6. $138.7 + 2.0786 = \underline{\hspace{2cm}}$

7. $2,008 - 987 = \underline{\hspace{2cm}}$

8. $70,207.9 - 789.3 = \underline{\hspace{2cm}}$

9. $2.098 - 1.34 = \underline{\hspace{2cm}}$

10. $78,003.07 - 45,009.7 = \underline{\hspace{2cm}}$

11. $7,090.98 - 3,567.7 = \underline{\hspace{2cm}}$

12. $3 - 0.089 = \underline{\hspace{2cm}}$

Multiplication/Division – Show all work.

1. $851 * 8 =$ _____

2. $9.2 * 0.74 =$ _____

3. $0.062 * 57 =$ _____

4. $709 * 0.35 =$ _____

5. $8,131 \div 3 =$ _____

6. $2,754 \div 81 =$ _____

7. $24620 \div 240 =$ _____

Give answers as a decimal rounded to the hundredth place if needed.

8. $36.8 \div 4 =$ _____

9. $4.28 \div 70 =$ _____

Decimal Multiplication and Division

1. Circle the best estimate for each product.

- a. $32.05 * 7.89 =$ 25 250 2500
- b. $460.32 * 0.093 =$ 40 400 4000
- c. $0.98 * 90.07 =$ 9 90 900
- d. $260.01 * 0.004 =$ 1 10 1000
- e. $849.05 * 6.043 =$ 50 500 5000

2. Write a number sentence for each problem. Then solve each problem.

a. Judy rides her bike for an average speed of 11.8 miles per hour. At that speed, about how many miles can she ride in $6\frac{1}{2}$ hours?

Number sentence _____ Solution _____

b. Catherine types at an average rate of 1.25 pages per quarter hour.

If she types for $2\frac{3}{4}$ hours, about how many pages can she type?

Number sentence _____ Solution _____

c. Find the area in square meters of a rectangle with length of 1.47 m and width 2.09 m.

Number sentence _____ Solution _____

3. Place the decimal point in each of the following products:

a. $14.09 * 3.82 = 538238$

b. $7.8 * 123.6 = 96408$

c. $18.05 * 2.22 = 40071$

d. $34.06 * 9.05 = 308243$

e. $47.1 * 0.006 = 2826$

Round the following number to the ten-thousand place.

1. 12,890 _____

2. 890 _____

3. 709,934 _____

4. 600,099 _____

5. 1,678,908 _____

6. 599,008 _____

Round the following to the hundredths place.

1. 102.305 _____

2. 3.0973 _____

3. 0.99703 _____

4. 7.0342 _____

5. 56.09978 _____

6. 12.70376 _____

Estimate each problem. Show how you arrive at your estimation.

1. $32,037.2 * 34 =$ _____

2. $15,993.45 - 989.034 =$ _____

3. $709 + 6,098 + 23.78 =$ _____

4. $245,347 / 786 =$ _____

5. $0.983 * 90.78 =$ _____

6. $3 / 8 =$ _____

7. $209,789 * 456,098 =$ _____

8. $7.098 + 34.078 + 67.45 + 798 =$ _____

9. $9.8 * 89.5 =$ _____

10. $78,003 / 207 =$ _____

Adding or Subtracting Fractions and Mixed Numbers

Add or subtract. Write each answer in simplest form. If possible, write answers as mixed numbers or whole numbers.

$$3\frac{1}{12} + 2\frac{5}{12} = \underline{\hspace{2cm}}$$

$$2\frac{5}{6} + 1\frac{4}{6} = \underline{\hspace{2cm}}$$

$$4\frac{6}{8} - 3\frac{2}{8} = \underline{\hspace{2cm}}$$

$$5\frac{1}{5} - 2\frac{3}{5} = \underline{\hspace{2cm}}$$

$$8 - 6\frac{1}{3} = \underline{\hspace{2cm}}$$

Add or subtract.

$$4. \quad \frac{1}{3}$$

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

$$5. \quad \frac{1}{2}$$

$$+ \frac{1}{6}$$

$$6. \quad \frac{3}{10}$$

$$- \frac{1}{5}$$

$$7. \quad \frac{7}{16}$$

$$- \frac{1}{4}$$

$$8. \quad \frac{5}{6}$$

$$- \frac{3}{8}$$

$$9. \quad \frac{7}{10}$$

$$+ \frac{1}{4}$$

$$10. \quad \frac{2}{3}$$

$$+ \frac{3}{10}$$

$$11. \quad \frac{3}{8}$$

$$- \frac{1}{10}$$

Make a factor tree for each number. Write the prime factorization using exponents if needed.

1.
$$\begin{array}{c} 36 \\ / \quad \backslash \end{array}$$

2.
$$\begin{array}{c} 100 \\ / \quad \backslash \end{array}$$

3.
$$\begin{array}{c} 49 \\ / \quad \backslash \end{array}$$

4.
$$\begin{array}{c} 78 \\ / \quad \backslash \end{array}$$

5.
$$\begin{array}{c} 324 \\ / \quad \backslash \end{array}$$

6.
$$\begin{array}{c} 141 \\ / \quad \backslash \end{array}$$

Area and Perimeter

Area of a rectangle = length * width

Or

$$A = l * w$$

Or

$$A = b * h$$

1. Wanda is helping her mother to make a vegetable garden in the shape of a rectangle 4 feet by 8 feet. Draw a rectangle with those dimensions if it helps.

a. Wanda wants to put a fence around the vegetable garden. How many feet of fence does she need? _____ft.

b. What is the area of this garden? (Circle one.)

32 ft. 144 sq. ft. 32 sq. ft. 24 ft.

c. Wanda measured the side that is 4 feet long. How many inches is that? _____in.

2. Wanda suggested making a flower garden in the shape of a square 6 ft. by 6 ft. Draw a square with those dimensions if it helps.

a. What will the area and perimeter of this garden be?

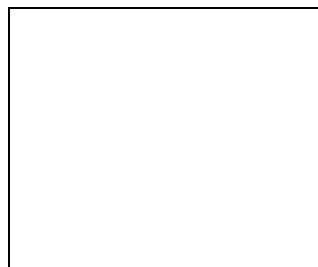
Area _____ Perimeter _____

b. Wanda wants to plant roses at least 3 feet apart. What is the largest number of rose plants she can fit into the square garden? _____

Challenge

3. Divide the square at the bottom of the page into 3 triangles that have the following properties:

- Two triangles have the same area
- The third triangle has twice the area of either of the others.

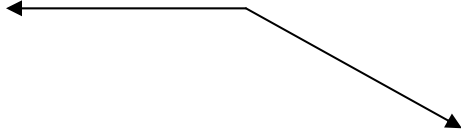
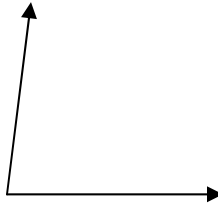
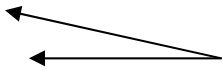
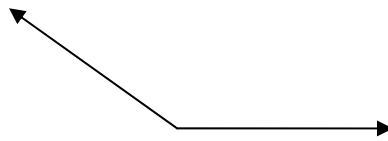
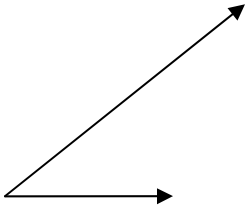


Fractions, Decimals, and Percents, More or Less

Fill in the blank with either an =, >, or < symbol.

1. $\frac{4}{5}$ _____ 80%
2. $\frac{3}{8}$ _____ 50%
3. 20% _____ 0.2
4. 0.17 _____ 17%
5. 46% _____ $\frac{1}{2}$
6. 81% _____ $\frac{81}{100}$
7. $\frac{3}{4}$ _____ 75%
8. 1.23 _____ 123%
9. 0.33 _____ 30%
10. $\frac{3}{10}$ _____ 30%
11. $\frac{5}{6}$ _____ 95%
12. 15% _____ $\frac{3}{20}$
13. 40% _____ $\frac{2}{5}$
14. 65% _____ 0.65
15. 0.125 _____ $12\frac{1}{2}\%$
16. 60% _____ $\frac{2}{3}$
17. 10% _____ $\frac{1}{8}$
18. 0.45 _____ 40%
19. $\frac{1}{4}$ _____ 25%
20. $2\frac{1}{2}$ _____ 250%
21. 90% _____ $\frac{4}{5}$
22. $\frac{3}{25}$ _____ 15%
23. $\frac{2}{3}$ _____ $66\frac{2}{3}\%$
24. $\frac{19}{20}$ _____ 99%

*Classify them as acute, obtuse, right, or straight angles.



Many Names – One Amount

Decimal	Simplest Form Fraction	Percent
0.35		
	$3 / 4$	
		50%
	$1 / 5$	
0.04		
	$13 / 20$	
		100%
		25%
1.50		
0.8		
	$13 / 50$	
		1%
0.98		
	$9 / 25$	
		13%

Solve the following rate problems using a rate table.

1. Susie was so excited she was going to get to work at her favorite ice cream store over the summer. Her boss told her he would pay her \$6.00 per hour. Using that rate of pay, complete the rate table below.

Hourly Pay	Hours Worked
\$6	1
	2
	4
\$45	

2. The old truck Mr. Jones has gets terrible gas mileage. Based on the rate given in the table, fill in the rest of the table.

Miles traveled	Gallons of Gas Used
	1
	2
60	5
72	
	10.5

During football games at WA, the concession stand sells lots of candy. The students' favorite is Skittles. Complete the rate table below.

Bags of Skittles	1	2	3		15	
Money spent		\$2.50		\$12.50		\$25.00