

Section 1.4 Exercises Part B

Create each fraction with a denominator of 24.

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

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

3. $\frac{40}{48}$

Add or Subtract. Simplify.

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

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

6. $\frac{5}{12} - \frac{7}{8} =$

7. $3\frac{2}{3} - 16\frac{7}{9} =$

8. $7\frac{5}{7} + 6\frac{5}{6} =$

9. $2\frac{5}{8} - 9\frac{3}{5} =$

Fill out the table.

	Mixed	Improper
10.	$-2\frac{5}{9}$	
11.	$6\frac{4}{7}$	
12.		$\frac{35}{8}$
13.		$\frac{57}{11}$

Find the multiplicative inverse or reciprocal of each number.

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

15. $3\frac{4}{9}$

16. $-\frac{5}{12}$

17. 7

Divide.

18. $\frac{2}{7} \div \frac{5}{3} =$

19. $\frac{3}{4} \div \frac{6}{7} =$

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

21. $2\frac{2}{3} \div \frac{3}{10} =$

22. $\frac{5}{8} \div 4\frac{1}{2} =$

23. $-2\frac{3}{7} \div \frac{5}{7} =$

Change into a decimal.

24. $\frac{2}{5}$

25. $\frac{1}{4}$


26. $\frac{3}{8}$

27. $\frac{1}{9}$

28. $\frac{7}{8}$

29. $\frac{1}{6}$

Change into a fraction and simplify.

<p>Example .12</p>	$.12 = 12 \text{ (100}^{\text{th}}) = \frac{12}{100}$		<p>simplify</p>	$= \frac{3}{25}$
------------------------	---	--	-----------------	------------------

30. .5

31. .7

32. .45

33. .52

34. .75

35. .6

Convert the following units.

Example: Dog food cost \$7.00 for 20 pounds. How many ounces per dollar?

Solution: $\frac{20 \text{ pounds}}{7 \text{ dollars}} \times \frac{16 \text{ ounces}}{1 \text{ pound}} = \frac{320 \text{ ounces}}{7 \text{ dollars}} = 45.71 \text{ ounces per dollar}$

36. Cereal cost \$4.50 for 2 pounds. How much did it cost per ounce?

37. Fishing line costs \$.02 per foot. How much would 200 yards cost?

38. I was able to drive 250 miles on 15 gallons of gas. If gas costs \$3.10 per gallon, how many miles can I drive per dollar?

39. If my sprinkler sends out 5 gallons per minute, and if water costs \$0.65 per 1000 gallons, how much does watering my lawn cost per hour?

40. How many Pesos are equal to 5 Euros? (1 Mexican Peso = \$0.08, 1 Euro = \$1.30)

41. How many Reals are equal to 7 Pounds? (1 Brazilian Real = \$0.55, 1 British Pound = \$1.50)

42. Create a visual chart for all arithmetic of decimals. Use plenty of examples.

43. Create a visual chart for all arithmetic of fractions including Unit Conversions.

Answers:

1. $\frac{16}{24}$
2. $\frac{14}{24}$
3. $\frac{20}{24}$
4. $\frac{24}{35}$
5. $1\frac{19}{36}$ or $\frac{55}{36}$
6. $-\frac{11}{24}$
7. $-13\frac{1}{9}$
8. $14\frac{23}{42}$
9. $-6\frac{39}{40}$
10. $-\frac{23}{9}$
11. $\frac{46}{7}$
12. $4\frac{3}{8}$
13. $5\frac{2}{11}$
14. $\frac{5}{3}$
15. $\frac{9}{31}$
16. $-\frac{12}{5}$
17. $\frac{1}{7}$
18. $\frac{6}{35}$
19. $\frac{7}{8}$
20. $\frac{3}{8}$
21. $8\frac{8}{9}$
22. $\frac{5}{36}$
23. $-3\frac{2}{5}$
24. .4
25. .25
26. .375
27. $\bar{1}$
28. .875
29. $\bar{.16}$
30. $\frac{1}{2}$
31. $\frac{7}{10}$
32. $\frac{9}{20}$
33. $\frac{13}{25}$
34. $\frac{3}{4}$
35. $\frac{3}{5}$
36. \$0.14 per ounce
37. \$12.00
38. 5.38 miles per dollar
39. \$0.20 per hour
40. 81.25 Pesos
41. 19.09 Reals
42. Part of Portfolio
43. Part of Portfolio