

Dividing Whole Numbers by Fractions

Simplify.

1. $11 \div \frac{1}{7}$ _____

2. $6 \div \frac{1}{3}$ _____

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

4. $7 \div \frac{2}{3}$ _____

5. $4 \div \frac{3}{4}$ _____

6. $11 \div \frac{3}{4}$ _____

7. $12 \div \frac{2}{5}$ _____

8. $11 \div \frac{4}{9}$ _____

9. $12 \div 3\frac{1}{2}$ _____

10. $7 \div \frac{3}{10}$ _____

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

12. $3 \div \frac{2}{5}$ _____

13. $5 \div 2\frac{2}{9}$ _____

14. $7 \div 2\frac{8}{9}$ _____

15. $8 \div \frac{1}{3}$ _____

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

17. $8 \div 1\frac{5}{6}$ _____

18. $10 \div 1\frac{7}{9}$ _____

19. $7 \div 1\frac{1}{5}$ _____

20. $4 \div 4\frac{1}{3}$ _____

21. $3 \div 4\frac{1}{5}$ _____

22. $10 \div 1\frac{1}{2}$ _____

23. $6 \div \frac{1}{2}$ _____

24. $7 \div \frac{2}{9}$ _____

25. $3 \div 2\frac{3}{5}$ _____

26. $11 \div 1\frac{3}{10}$ _____

27. $10 \div 1\frac{5}{9}$ _____

28. $7 \div 2\frac{4}{7}$ _____

29. $8 \div 1\frac{1}{3}$ _____

30. $8 \div 1\frac{1}{2}$ _____

31. $12 \div 1\frac{1}{3}$ _____

32. $8 \div \frac{3}{7}$ _____

33. $5 \div 2\frac{2}{5}$ _____

34. $8 \div \frac{1}{7}$ _____

35. $8 \div 2\frac{1}{3}$ _____

36. $5 \div \frac{2}{3}$ _____

37. $7 \div 2\frac{5}{9}$ _____

38. $3 \div \frac{1}{3}$ _____

39. $11 \div 2\frac{2}{3}$ _____

40. $3 \div 2\frac{1}{3}$ _____

41. $5 \div 1\frac{1}{5}$ _____

42. $4 \div \frac{2}{5}$ _____

43. **Science** A baby walrus is 4 feet long. This is $\frac{2}{5}$ of the length of an adult male. What is the length of an adult male walrus? _____

44. **Measurement** One yard (36 inches) is equal to $\frac{2}{11}$ of a rod. How many inches are in a rod? _____

Dividing Fractions by Fractions

Simplify.

1. $1\frac{4}{5} \div \frac{1}{3}$ _____

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

3. $3\frac{4}{7} \div 3\frac{1}{2}$ _____

4. $3\frac{4}{5} \div 1\frac{5}{7}$ _____

5. $\frac{2}{5} \div 4\frac{3}{5}$ _____

6. $4\frac{1}{8} \div \frac{3}{7}$ _____

7. $\frac{1}{2} \div \frac{2}{5}$ _____

8. $2\frac{4}{5} \div 4\frac{3}{4}$ _____

9. $\frac{5}{6} \div 1\frac{3}{4}$ _____

10. $1\frac{5}{7} \div 1\frac{2}{3}$ _____

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

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

13. $\frac{1}{3} \div 2\frac{1}{6}$ _____

14. $1\frac{4}{9} \div \frac{6}{7}$ _____

15. $1\frac{3}{4} \div \frac{4}{5}$ _____

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

17. $1\frac{1}{3} \div 1\frac{3}{4}$ _____

18. $\frac{1}{3} \div \frac{2}{7}$ _____

19. $\frac{1}{2} \div 3\frac{1}{4}$ _____

20. $2\frac{1}{4} \div 3\frac{4}{9}$ _____

21. $4\frac{2}{7} \div 1\frac{1}{6}$ _____

22. $\frac{4}{5} \div 3\frac{2}{5}$ _____

23. $1\frac{1}{5} \div \frac{1}{3}$ _____

24. $\frac{4}{5} \div \frac{1}{6}$ _____

25. $\frac{8}{9} \div 2\frac{5}{7}$ _____

26. $1\frac{1}{4} \div 2\frac{2}{3}$ _____

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

28. $\frac{1}{4} \div \frac{1}{4}$ _____

29. $1\frac{7}{8} \div 1\frac{1}{4}$ _____

30. $1\frac{3}{4} \div \frac{1}{5}$ _____

31. $4\frac{2}{7} \div 1\frac{1}{2}$ _____

32. $5\frac{1}{7} \div 2\frac{1}{2}$ _____

33. $1\frac{1}{9} \div \frac{1}{5}$ _____

34. $1\frac{1}{2} \div 1\frac{2}{3}$ _____

35. $\frac{7}{8} \div \frac{2}{7}$ _____

36. $1\frac{5}{8} \div \frac{5}{9}$ _____

37. $\frac{1}{4} \div \frac{4}{5}$ _____

38. $1\frac{1}{2} \div 3\frac{1}{2}$ _____

39. $1\frac{3}{5} \div \frac{1}{3}$ _____

40. $\frac{1}{2} \div 3\frac{5}{7}$ _____

41. $1\frac{1}{3} \div 1\frac{2}{3}$ _____

42. $1\frac{1}{2} \div 2\frac{3}{4}$ _____

43. Measurement A cake recipe calls for $\frac{5}{8}$ of a cup of butter. One tablespoon equals $\frac{1}{16}$ of a cup. How many tablespoons of butter are used to make the cake?

44. Geography One square mile equals $\frac{1}{36}$ of a township. The area of Austin, Texas, is $6\frac{4}{9}$ townships. Find the area in square miles.

Name _____

**Practice
7-2**
Multiplying by a Whole Number

Simplify.

1. $5\frac{1}{2} \times 3$ $16\frac{1}{2}$ 2. $3 \times 4\frac{5}{6}$ $14\frac{1}{2}$ 3. $4 \times 5\frac{2}{3}$ $22\frac{2}{3}$
 4. $10 \times 3\frac{5}{6}$ $38\frac{1}{3}$ 5. $12\frac{1}{4} \times 4$ $50\frac{2}{7}$ 6. $10 \times 2\frac{1}{3}$ $23\frac{1}{3}$
 7. $6 \times 6\frac{1}{7}$ $36\frac{6}{7}$ 8. $4\frac{1}{2} \times 2$ 9 9. $3\frac{4}{7} \times 8$ $28\frac{4}{7}$
 10. $12 \times 3\frac{1}{4}$ 39 11. $5 \times 5\frac{1}{3}$ $26\frac{2}{3}$ 12. $14 \times 3\frac{1}{2}$ 49
 13. $3\frac{3}{4} \times 2$ $7\frac{1}{2}$ 14. $4 \times 9\frac{5}{9}$ $38\frac{2}{9}$ 15. $3 \times 6\frac{2}{3}$ 20
 16. $8 \times 5\frac{3}{5}$ $44\frac{4}{5}$ 17. $10 \times 4\frac{1}{2}$ 45 18. $4 \times 12\frac{2}{3}$ $50\frac{2}{3}$
 19. $8\frac{1}{6} \times 4$ $32\frac{2}{3}$ 20. $11 \times 4\frac{1}{3}$ $47\frac{2}{3}$ 21. $10\frac{1}{2} \times 5$ $52\frac{1}{2}$
 22. $14 \times 3\frac{1}{5}$ $44\frac{4}{5}$ 23. $2\frac{1}{2} \times 5$ $12\frac{1}{2}$ 24. $7 \times 7\frac{5}{9}$ $52\frac{8}{9}$
 25. $10\frac{1}{2} \times 2$ 21 26. $7\frac{1}{5} \times 6$ $43\frac{1}{5}$ 27. $13 \times 2\frac{1}{2}$ $32\frac{1}{2}$
 28. $6\frac{5}{6} \times 4$ $27\frac{1}{3}$ 29. $4\frac{1}{6} \times 4$ $16\frac{4}{5}$ 30. $12\frac{5}{7} \times 4$ $50\frac{6}{7}$
 31. $4 \times 10\frac{1}{2}$ 42 32. $11\frac{7}{10} \times 4$ $46\frac{4}{5}$ 33. $2 \times 13\frac{1}{4}$ $26\frac{1}{2}$
 34. $12 \times 2\frac{4}{7}$ $30\frac{6}{7}$ 35. $4 \times 11\frac{2}{3}$ $46\frac{2}{3}$ 36. $8\frac{1}{7} \times 4$ $32\frac{4}{7}$
 37. $4 \times 12\frac{1}{2}$ 50 38. $10\frac{3}{4} \times 4$ 43 39. $3 \times 12\frac{1}{5}$ $36\frac{3}{5}$

- 40.
- Health**
- Complete the table for calories in a certain brand of granola cereal.

Servings	$\frac{1}{2}$	$\frac{2}{3}$	$\frac{3}{4}$	1	$1\frac{1}{3}$	$2\frac{1}{2}$
Ounces	1	$1\frac{1}{3}$	$1\frac{1}{2}$	2	$2\frac{2}{3}$	5
Calories	120	160	180	240	320	600

- 41.
- Science**
- The longest recorded jump by a kangaroo covered a distance of 45 feet. This is
- $3\frac{3}{4}$
- times the longest jump from a standing position by a human. Find the length of the longest jump from a standing position by a human.

12 ft

Use with pages 370-374. B1

Name _____

**Practice
7-3**
Multiplying by a Fraction

Find each product.

1. $5\frac{1}{2} \times \frac{1}{2}$ $2\frac{3}{4}$ 2. $\frac{2}{3} \times \frac{9}{10}$ $\frac{3}{5}$ 3. $\frac{1}{4} \times \frac{3}{5}$ $\frac{3}{20}$
 4. $8\frac{1}{4} \times \frac{1}{2}$ $4\frac{1}{8}$ 5. $\frac{5}{6} \times \frac{2}{3}$ $\frac{5}{9}$ 6. $\frac{5}{8} \times \frac{1}{9}$ $\frac{5}{72}$
 7. $\frac{1}{7} \times \frac{1}{2}$ $\frac{1}{14}$ 8. $\frac{2}{3} \times \frac{4}{9}$ $\frac{8}{27}$ 9. $\frac{5}{8} \times \frac{3}{8}$ $\frac{15}{64}$
 10. $\frac{1}{2} \times \frac{4}{13}$ $\frac{2}{13}$ 11. $\frac{1}{3} \times \frac{2}{7}$ $\frac{2}{21}$ 12. $\frac{13}{16} \times \frac{1}{4}$ $\frac{13}{64}$
 13. $\frac{2}{5} \times \frac{4}{5}$ $\frac{8}{25}$ 14. $\frac{1}{11} \times \frac{2}{5}$ $\frac{2}{55}$ 15. $\frac{7}{9} \times \frac{2}{11}$ $\frac{14}{99}$
 16. $\frac{3}{4} \times \frac{1}{2}$ $\frac{3}{8}$ 17. $\frac{1}{2} \times \frac{14}{15}$ $\frac{7}{15}$ 18. $\frac{1}{5} \times \frac{1}{3}$ $\frac{1}{15}$
 19. $\frac{11}{15} \times \frac{1}{10}$ $\frac{11}{150}$ 20. $\frac{8}{9} \times \frac{2}{7}$ $\frac{16}{63}$ 21. $\frac{7}{8} \times \frac{11}{14}$ $\frac{11}{16}$
 22. $\frac{1}{2} \times \frac{5}{7}$ $\frac{5}{14}$ 23. $\frac{3}{4} \times \frac{1}{3}$ $\frac{1}{4}$ 24. $\frac{1}{2} \times \frac{7}{8}$ $\frac{7}{16}$
 25. $\frac{2}{15} \times \frac{1}{2}$ $\frac{1}{15}$ 26. $\frac{1}{3} \times \frac{4}{6}$ $\frac{4}{15}$ 27. $\frac{10}{11} \times \frac{2}{3}$ $5\frac{5}{33}$
 28. $\frac{10}{11} \times \frac{5}{6}$ $\frac{25}{33}$ 29. $\frac{1}{5} \times \frac{1}{2}$ $\frac{1}{10}$ 30. $\frac{3}{10} \times 2\frac{1}{2}$ $3\frac{3}{4}$
 31. $\frac{12}{13} \times \frac{3}{10}$ $\frac{18}{65}$ 32. $\frac{2}{3} \times \frac{1}{3}$ $\frac{2}{9}$ 33. $\frac{2}{3} \times \frac{7}{8}$ $\frac{14}{27}$
 34. $\frac{5}{12} \times 3\frac{7}{12}$ $1\frac{71}{144}$ 35. $\frac{1}{6} \times \frac{2}{7}$ $\frac{1}{21}$ 36. $\frac{3}{5} \times \frac{7}{11}$ $\frac{21}{55}$
 37. $\frac{1}{2} \times 7\frac{9}{13}$ $3\frac{11}{13}$ 38. $\frac{2}{3} \times \frac{2}{5}$ $\frac{4}{15}$ 39. $\frac{2}{7} \times \frac{1}{10}$ $\frac{1}{35}$

- 40.
- Science**
- The total weight of all of the insects in the world is about
- $\frac{7}{25}$
- of a billion tons. The total weight of all humans is about
- $\frac{1}{5}$
- of this amount. Find the total weight of all humans.

About $\frac{7}{60}$ billion tons

41. A recipe for minestrone soup calls for
- $3\frac{1}{3}$
- cups of vegetable stock. How much stock would you use to make
- $\frac{2}{3}$
- of the amount of soup in the original recipe?

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

B2 Use with pages 375-378.

Name _____

Practice
Section 7A Review

Estimate each product or quotient.

1. $4\frac{5}{6} \times 12\frac{2}{5} \approx 60$ 2. $7\frac{3}{4} \div 2\frac{2}{3} \approx 2\frac{2}{3}$ 3. $3\frac{4}{9} \times 10\frac{2}{7} \approx 30$
 4. $6\frac{1}{4} \div 4\frac{4}{7} \approx 1\frac{4}{5}$ 5. $11\frac{1}{2} \times 13\frac{2}{5} \approx 156$ 6. $6\frac{4}{7} \div 3\frac{5}{6} \approx 2\frac{1}{4}$

Simplify.

7. $4\frac{1}{8} \times 4$ $16\frac{4}{9}$ 8. $8 \times 3\frac{1}{2}$ 28 9. $1\frac{1}{3} \times 2\frac{1}{2}$ $3\frac{1}{3}$
 10. $4\frac{1}{10} \times 8$ $32\frac{4}{5}$ 11. $\frac{1}{2} \times 4$ 2 12. $5 \times 2\frac{3}{8}$ $11\frac{3}{8}$

13. The table shows the ingredients in a recipe for papaya ice cream from
- Kathy Cooks Naturally*
- . Complete the table to show how much of each ingredient you would use to make 4 times or 6 times the amount of the original recipe.

Ingredient	Ripe papaya	Orange juice	Lemon juice	Whipping cream	Honey
Original recipe	$1\frac{1}{2}$ cups	$\frac{1}{2}$ cup	$\frac{3}{16}$ cup	$1\frac{1}{2}$ cups	$\frac{1}{2}$ cup
4 times	6 cups	2 cups	$\frac{3}{4}$ cup	6 cups	2 cups
6 times	9 cups	3 cups	$1\frac{1}{8}$ cups	9 cups	3 cups

14. Fancy tomatoes are selling for \$1.95 per pound. Can you buy $2\frac{1}{4}$ pounds if you only have \$4.00? **No**
 15. Mrs. Gonzales bought $3\frac{1}{4}$ pounds of candy for Halloween. She gave away $\frac{2}{3}$ of the candy. How much candy was left over? **$1\frac{1}{4}$ lb**
 16. Fine Arts Rodney is making a macramé belt that is to be $1\frac{1}{4}$ meters long. If $\frac{1}{3}$ of the belt has been completed, how many meters of the belt have been completed? **$\frac{5}{12}$ m**
 17. Some giant dump trucks use tires with a diameter of 12.5 feet. Find the area of a wheel with this tire. [Lesson 4-8] **About 122.7 ft²**
 18. Rick had $\frac{7}{8}$ of a cup of lemon juice. After making a pie, he had $\frac{2}{8}$ cup of lemon juice left. How much lemon juice did he use in the pie? [Lesson 6-3] **$\frac{3}{8}$ cup**

Use with page 380. B3

Name _____

**Practice
7-4**
Dividing Whole Numbers by Fractions

Simplify.

1. $11 \div \frac{1}{7}$ 77 2. $6 \div \frac{1}{3}$ 18 3. $3 \div \frac{5}{8}$ $1\frac{11}{13}$
 4. $7 \div \frac{2}{3}$ $10\frac{1}{2}$ 5. $4 \div \frac{3}{4}$ $5\frac{1}{3}$ 6. $11 \div \frac{3}{4}$ $14\frac{2}{3}$
 7. $12 \div \frac{2}{6}$ 30 8. $11 \div \frac{4}{6}$ $24\frac{3}{4}$ 9. $12 \div \frac{1}{2}$ $3\frac{3}{7}$
 10. $7 \div \frac{3}{10}$ $23\frac{1}{3}$ 11. $11 \div \frac{1}{2}$ 22 12. $3 \div \frac{2}{5}$ $7\frac{1}{2}$
 13. $5 \div 2\frac{2}{9}$ $2\frac{1}{4}$ 14. $7 \div 2\frac{8}{9}$ $2\frac{11}{26}$ 15. $8 \div \frac{1}{3}$ 24
 16. $8 \div 1\frac{1}{4}$ $6\frac{2}{5}$ 17. $8 \div 1\frac{5}{6}$ $4\frac{4}{11}$ 18. $10 \div 1\frac{7}{6}$ $5\frac{5}{8}$
 19. $7 \div 1\frac{1}{5}$ $5\frac{5}{6}$ 20. $4 \div 4\frac{1}{3}$ $\frac{12}{13}$ 21. $3 \div 4\frac{1}{5}$ $\frac{5}{7}$
 22. $10 \div 1\frac{1}{2}$ $6\frac{2}{3}$ 23. $6 \div \frac{1}{2}$ 12 24. $7 \div \frac{2}{9}$ $31\frac{1}{2}$
 25. $3 \div 2\frac{2}{5}$ $1\frac{2}{13}$ 26. $11 \div 1\frac{3}{10}$ $8\frac{13}{13}$ 27. $10 \div 1\frac{5}{5}$ $6\frac{2}{7}$
 28. $7 \div 2\frac{4}{7}$ $2\frac{13}{18}$ 29. $8 \div 1\frac{1}{3}$ 6 30. $8 \div 1\frac{1}{2}$ $5\frac{1}{3}$
 31. $12 \div 1\frac{1}{3}$ 9 32. $8 \div \frac{3}{7}$ $18\frac{2}{3}$ 33. $5 \div 2\frac{2}{5}$ $2\frac{1}{12}$
 34. $8 \div \frac{1}{7}$ 56 35. $8 \div 2\frac{1}{3}$ $3\frac{2}{7}$ 36. $5 \div \frac{2}{3}$ $7\frac{1}{2}$
 37. $7 \div 2\frac{5}{9}$ $2\frac{17}{23}$ 38. $9 \div \frac{1}{3}$ 9 39. $11 \div 2\frac{2}{3}$ $4\frac{1}{8}$
 40. $3 \div 2\frac{1}{3}$ $1\frac{2}{7}$ 41. $5 \div 1\frac{1}{5}$ $4\frac{1}{6}$ 42. $4 \div \frac{2}{5}$ 10

- 43.
- Science**
- A baby walrus is 4 feet long. This is
- $\frac{2}{5}$
- of the length of an adult male. What is the length of an adult male walrus?

10 ft

- 44.
- Measurement**
- One yard (36 inches) is equal to
- $\frac{2}{11}$
- of a rod. How many inches are in a rod?

198 in.

B4 Use with pages 382-386.

Name _____

**Practice
7-5**
Dividing Fractions by Fractions

Simplify.

1. $1\frac{1}{5} \div \frac{1}{3} = \frac{5}{5} \cdot \frac{3}{1} = \frac{13}{3}$ 2. $\frac{2}{3} \div \frac{1}{8} = \frac{13}{3} \cdot \frac{8}{1} = \frac{104}{3}$ 3. $3\frac{4}{7} \div 3\frac{1}{2} = \frac{1}{49}$
4. $3\frac{5}{8} \div 1\frac{5}{7} = \frac{213}{60}$ 5. $\frac{2}{5} \div 4\frac{3}{5} = \frac{2}{23}$ 6. $4\frac{1}{8} \div \frac{3}{7} = \frac{95}{8}$
7. $\frac{1}{2} \div \frac{2}{5} = \frac{1}{4}$ 8. $\frac{2}{5} \div 4\frac{3}{4} = \frac{56}{95}$ 9. $\frac{5}{6} \div 1\frac{3}{4} = \frac{10}{21}$
10. $1\frac{5}{7} \div 1\frac{2}{3} = \frac{1}{35}$ 11. $\frac{8}{9} \div \frac{1}{2} = \frac{17}{9}$ 12. $\frac{1}{4} \div \frac{2}{5} = \frac{5}{8}$
13. $\frac{1}{3} \div 2\frac{1}{6} = \frac{2}{13}$ 14. $\frac{4}{8} \div \frac{6}{7} = \frac{137}{54}$ 15. $1\frac{3}{4} \div \frac{4}{5} = \frac{23}{16}$
16. $\frac{1}{3} \div \frac{2}{5} = \frac{5}{6}$ 17. $1\frac{1}{3} \div 1\frac{3}{4} = \frac{16}{21}$ 18. $\frac{1}{3} \div \frac{2}{7} = \frac{1}{6}$
19. $\frac{1}{2} \div 3\frac{1}{4} = \frac{2}{13}$ 20. $2\frac{1}{4} \div 3\frac{5}{8} = \frac{81}{124}$ 21. $4\frac{2}{7} \div 1\frac{1}{8} = \frac{339}{49}$
22. $\frac{4}{5} \div 3\frac{2}{5} = \frac{4}{17}$ 23. $1\frac{1}{5} \div \frac{1}{3} = \frac{3}{5}$ 24. $\frac{4}{5} \div \frac{1}{6} = \frac{4}{5}$
25. $\frac{8}{9} \div 2\frac{5}{7} = \frac{56}{171}$ 26. $1\frac{1}{4} \div 2\frac{3}{5} = \frac{15}{32}$ 27. $\frac{1}{4} \div 1\frac{5}{9} = \frac{9}{56}$
28. $\frac{1}{4} \div \frac{1}{4} = 1$ 29. $\frac{7}{8} \div 1\frac{1}{4} = \frac{1}{2}$ 30. $1\frac{3}{4} \div \frac{1}{5} = \frac{8}{3}$
31. $4\frac{2}{7} \div 1\frac{1}{2} = \frac{26}{7}$ 32. $6\frac{1}{7} \div 2\frac{1}{2} = \frac{2}{35}$ 33. $1\frac{1}{9} \div \frac{1}{5} = \frac{5}{9}$
34. $1\frac{1}{2} \div 1\frac{2}{3} = \frac{9}{10}$ 35. $\frac{7}{8} \div \frac{2}{7} = \frac{3}{16}$ 36. $\frac{5}{8} \div \frac{5}{9} = \frac{237}{40}$
37. $\frac{1}{4} \div \frac{4}{5} = \frac{5}{16}$ 38. $1\frac{1}{2} \div 3\frac{1}{2} = \frac{3}{7}$ 39. $1\frac{3}{5} \div \frac{1}{3} = \frac{4}{5}$
40. $\frac{1}{2} \div 3\frac{5}{7} = \frac{7}{52}$ 41. $1\frac{1}{3} \div 1\frac{2}{5} = \frac{4}{5}$ 42. $1\frac{1}{2} \div 2\frac{3}{4} = \frac{6}{11}$

43. **Measurement** A cake recipe calls for $\frac{3}{8}$ of a cup of butter. One tablespoon equals $\frac{1}{16}$ of a cup. How many tablespoons of butter are used to make the cake? **10 tablespoons**

44. **Geography** One square mile equals $\frac{1}{36}$ of a township. The area of Austin, Texas, is $6\frac{2}{3}$ townships. Find the area in square miles. **232 mi²**

Use with pages 387-393. 85

Name _____

**Practice
7-6**
**Solving Fraction Equations:
Multiplication and Division**

Solve.

1. $n + 4\frac{1}{3} = \frac{1}{2}$ 2. $2\frac{6}{7}f = \frac{1}{3}$ 3. $f + 2\frac{5}{7} = \frac{1}{2}$ 4. $n + 3\frac{3}{5} = 2\frac{1}{3}$
- $n = \frac{2}{3}$ $f = \frac{7}{60}$ $f = \frac{15}{14}$ $n = \frac{8}{5}$
5. $n \div 1\frac{2}{5} = 1$ 6. $\frac{1}{2}u = 5\frac{3}{5}$ 7. $q + 2\frac{1}{3} = \frac{3}{8}$ 8. $c + 2\frac{4}{5} = \frac{1}{2}$
- $n = \frac{1}{5}$ $u = 11\frac{1}{5}$ $q = \frac{7}{8}$ $c = \frac{1}{5}$
9. $b + \frac{2}{3} = 2\frac{6}{7}$ 10. $\frac{1}{4}n = 2$ 11. $f + 1\frac{1}{2} = 3$ 12. $h + 2\frac{2}{5} = \frac{3}{5}$
- $b = \frac{119}{21}$ $n = 8$ $f = 3\frac{3}{2}$ $h = \frac{11}{25}$
13. $2f = \frac{1}{4}$ 14. $2z = 3\frac{2}{5}$ 15. $2\frac{1}{4}v = \frac{1}{4}$ 16. $h + 3\frac{1}{8} = 2$
- $f = \frac{1}{8}$ $z = \frac{15}{10}$ $v = \frac{1}{9}$ $h = 6\frac{1}{4}$
17. $v + \frac{1}{3} = \frac{2}{5}$ 18. $3\frac{7}{10}q = 1$ 19. $h + \frac{7}{10} = \frac{1}{2}$ 20. $1c = 1\frac{1}{3}$
- $v = \frac{2}{15}$ $q = \frac{10}{37}$ $h = \frac{7}{20}$ $c = \frac{1}{3}$
21. $w \div 1\frac{1}{2} = 3\frac{1}{4}$ 22. $d \div 2\frac{1}{8} = 2\frac{1}{3}$ 23. $v \div \frac{2}{3} = 1\frac{1}{2}$ 24. $z \div \frac{1}{3} = 1$
- $w = \frac{47}{8}$ $d = \frac{423}{24}$ $v = 1$ $z = \frac{1}{3}$
25. $t \div 2 = 2$ 26. $b + 1 = 1\frac{2}{5}$ 27. $\frac{6}{9}z = \frac{1}{3}$ 28. $1\frac{7}{10}m = 4$
- $t = 4$ $b = \frac{1}{5}$ $z = \frac{3}{5}$ $m = \frac{2}{17}$

29. The largest U.S. standard postage stamp ever issued has a width of $1\frac{1}{11}$ inches, which was $\frac{3}{4}$ of the height of the stamp. Write and solve an equation to find the height of the stamp.

Possible answer: $\frac{3}{4}x = 1\frac{1}{11}; 1\frac{5}{11}$ in.

30. Candace said, "I'm thinking of a fraction. If I divide it by $2\frac{1}{2}$, I get $\frac{3}{11}$." What fraction was Candace thinking of? **$\frac{15}{22}$**

86 Use with pages 392-396.

Name _____

Practice
Section 7B Review

Simplify.

1. $1\frac{7}{8} + 1\frac{5}{7} = \frac{13}{32}$ 2. $7 \div 3\frac{1}{5} = \frac{117}{16}$ 3. $\frac{1}{6} \times 5\frac{2}{3} = \frac{10}{18}$ 4. $3 \div 2\frac{1}{2} = \frac{1}{2}$
5. $3\frac{1}{3} \times 7\frac{1}{2} = 25$ 6. $3\frac{2}{5} + \frac{1}{3} = \frac{104}{15}$ 7. $2\frac{1}{2} \div 7\frac{2}{3} = \frac{15}{46}$ 8. $2\frac{2}{5} \times 8 = \frac{204}{5}$
9. **Measurement** One teaspoon is $\frac{1}{4}$ of a tablespoon. A bread recipe calls for 2 tablespoons of yeast. How many teaspoons is this? **6 teaspoons**
10. **Measurement** There are $1\frac{3}{8}$ American tons in one British ton (long ton). How many British tons are in 7 American tons? **$6\frac{1}{4}$ British tons**

Solve.

11. $1\frac{2}{7}g = \frac{1}{2}$ 12. $x \div \frac{1}{2} = 1\frac{1}{3}$ 13. $\frac{7}{8}f = \frac{3}{5}$ 14. $s + 3 = \frac{8}{4}$
- $g = \frac{7}{18}$ $x = \frac{2}{3}$ $f = \frac{24}{35}$ $s = \frac{1}{4}$

15. Write and solve an equation to find the number of furlongs in 12 rods. (1 rod = $\frac{1}{40}$ furlong)

Possible answer: $x \times 40 = 12; \frac{3}{10}$ furlong

16. Write and solve an equation to find the number of pounds in 8 kilograms. (1 kilogram = $2\frac{1}{2}$ pounds)

Possible answer: $x \div 2\frac{1}{2} = 8; 17\frac{3}{5}$ lb

17. The road distance from Toledo, Ohio, to Detroit, Michigan, is 4720 chains. One mile = 80 chains. Explain how you could use either multiplication or division to find the number of miles from Toledo to Detroit.

Possible answer: $4720 \times \frac{1}{80} = 4720 \div 80 = 59$ miles

18. **Science** The largest birds' egg ever measured was laid by an ostrich in 1985 and had a mass of 2.32 kilograms. A typical albatross egg has about one fourth of this mass. Find the mass of an albatross egg. [Lesson 3-12]

About 0.58 kg

19. **Fine Arts** Rodin's bronze sculpture of Jules Dalou is $20\frac{3}{8}$ inches tall. His marble *Hand of God* is $15\frac{1}{2}$ inches taller. Find the height of the *Hand of God*.

$36\frac{5}{8}$ in.

Use with page 396. 87

Name _____

Practice
Cumulative Review Chapters 1-7

Write the phrase as an expression. [Lesson 2-1]

1. y divided by 7 $\frac{y}{7}$ 2. m times 5 $m \times 5$
3. 15 less than u $u - 15$ 4. one-third of k $\frac{1}{3} \times k$
5. d increased by 12 $d + 12$ 6. c doubled $2c$
7. half of g $\frac{g}{2}$ 8. p cubed p^3

Multiply. [Lesson 3-9]

9. $0.01 \times 6.45 = 0.0645$ 10. $895 \times 0.001 = 0.895$ 11. $2.83 \times 9.7 = 27.451$
12. $0.38 \times 0.06 = 0.0304$ 13. $12.7 \times 0.85 = 10.795$ 14. $2.3 \times 18 = 41.4$
15. $0.43 \times 0.7 = 0.301$ 16. $8.41 \times 0.03 = 0.2523$ 17. $34.8 \times 1.2 = 41.76$

Convert. [Lesson 4-2]

18. 85 g = 0.085 kg 19. 42 kg = 42,000 g 20. 3.82 mL = 0.00382 L
21. 73 cm = 0.73 m 22. 6.2 L = 6,200 mL 23. 9.4 m = 9,400 mm
24. 183 m = 0.183 km 25. 31 mm = 0.031 m 26. 2.9 km = 290,000 cm

Simplify. [Lessons 7-2 to 7-5]

27. $\frac{1}{3} \div 4\frac{1}{2} = \frac{2}{77}$ 28. $3 \div 1\frac{3}{4} = \frac{15}{7}$ 29. $2 + 10\frac{1}{2} = \frac{4}{21}$ 30. $4\frac{1}{2} + 15 = \frac{3}{10}$
31. $2 \div 3\frac{3}{4} = \frac{8}{15}$ 32. $2\frac{2}{5} \times 6 = \frac{14}{5}$ 33. $4\frac{3}{4} + 1\frac{1}{5} = \frac{323}{24}$ 34. $6\frac{1}{2} \times 7\frac{1}{2} = 48\frac{3}{4}$

Solve. [Lesson 7-6]

35. $\frac{1}{9}q = \frac{1}{6}$ 36. $k + \frac{1}{6} = \frac{7}{9}$ 37. $g + 1\frac{3}{4} = 4$ 38. $p \div 2\frac{1}{2} = 2\frac{1}{4}$
- $q = \frac{1}{2}$ $k = \frac{7}{54}$ $g = 7$ $p = \frac{5}{8}$
39. $p + \frac{1}{4} = \frac{7}{9}$ 40. $\frac{1}{4}n = 2\frac{2}{3}$ 41. $v + \frac{1}{5} = 3$ 42. $f + \frac{5}{9} = 2\frac{1}{2}$
- $p = \frac{7}{36}$ $n = 10\frac{2}{3}$ $v = \frac{3}{5}$ $f = 1\frac{7}{18}$

88 Use with page 403.