

Skills Practice

Lesson 1.1

Name _____ Date _____

1

Reflect & Review

1. Jack and Pablo are looking for summer jobs. Jack finds a job that pays \$7.25 per hour and guarantees 30 hours per week. Pablo finds a job that pays \$8.35 per hour and guarantees 25 hours per week. Find the earnings per week for each person.
2. Sam is collecting monetary donations for the food pantry. He collects \$372.31 from the freshman class, \$231.44 from the sophomore class, \$543.87 from the junior class, and \$632.22 from the senior class. How much money did Sam collect for the food pantry?
3. Use mental math to find the sum of 40 and 38.
4. Estimate the product of 450 and 820.
5. Ice cream costs \$3.55 per gallon. How much do 5 gallons of ice cream cost?

Practice

Simplify each expression.

6. $(4 + 13) - (7 + 2)$

7. $6 \times 4 + 1 - 5$

8. $8 + 27 \div 3$

9. $4 \times 3 + 6$

10. $15 \div 5 + 14 - 8$

11. $9 - 3 \times 2 + 6$

Decide where to place the parentheses so that the answer is correct using the order of operations.

12. $14 + 7 \div 3 + 8 = 15$

13. $9 - 6 + 2 \div 2 = 5$

Name _____ Date _____

1

Reflect & Review

1. You buy four 3-ring binders for \$14. How much does one 3-ring binder cost?
2. Piper is making oatmeal raisin cookies for your class party. One batch of the recipe she is using makes 24 cookies. If Piper makes 3 batches of the recipe, how many cookies will she have?
3. You purchase 5 DVDs for \$15.99 each and 6 video game cartridges for \$35.99 each. What is the total cost of your purchase?
4. Use mental math to find the product of 20 and 161. 5. Simplify $7 + 12 \div 6 - 2 \times 3$.

Practice

List all of the factor pairs of each number.

- | | |
|---|---|
| 6. 30 | 7. 27 |
| 8. 42 | 9. 31 |
| 10. Is 3 a factor of 57? Justify your answer. | 11. Is 4 a factor of 64? Justify your answer. |
| 12. Is 7 a factor of 98? Justify your answer. | 13. Is 5 a factor of 33? Justify your answer. |

List all of the factors of each number in each pair. Then circle the factors that the numbers have in common.

- | | |
|------------|------------|
| 14. 12, 15 | 15. 24, 36 |
|------------|------------|

List the first five multiples of each number.

- | | |
|--------|--------|
| 16. 15 | 17. 40 |
|--------|--------|

Name _____ Date _____

1

Reflect & Review

1. One third of your class of 18 students likes vanilla frozen yogurt. How many students in your class like vanilla frozen yogurt?
2. Your teacher is rearranging 24 desks in a classroom. He wants the same number of desks in each row. Find all possible rectangular arrangements that have no more than 10 desks in any row or column.
3. A museum is displaying a 54-piece coin collection in groups so that the same number of coins is in each group. List the different ways in which the coins can be displayed.
4. Write all of the factors of 45.
5. Simplify $4 + 3 \times 6 - 8 \div 2$.

Practice

6. List the first eight multiples of 2.
7. List the first ten multiples of 5.
8. List the first ten multiples of 3 and 4. Circle the multiples that 3 and 4 have in common.
9. List the first eight multiples of 6 and 8. Circle the multiples that 6 and 8 have in common.
10. Is 42 a multiple of 4? Justify your answer.
11. Is 63 a multiple of 7? Justify your answer.

Find the least common multiple of each pair of numbers.

12. 15, 25
13. 12, 16
14. 27, 36

Skills Practice

Lesson 1.4

Name _____ Date _____

1

Reflect & Review

1. You run 2 miles every third day and swim every Wednesday. Today you are going to run and swim. In how many days will you run and swim on the same day?
2. You are balancing your checkbook. The beginning balance is \$64.32. You have written checks for \$11.08, \$4.82, and \$15.91. What is the ending balance of your checkbook?
3. Use mental math to find the product of 67 and 40.
4. Demonstrate the commutative property of multiplication using the numbers 7 and 15.
5. Decide where to place parentheses so that the statement is true.
 $24 - 12 + 3 + 8 - 2 = 15$

Practice

6. Is 54 prime or composite? Justify your answer.
7. List the next three prime numbers after 7.
8. True or False: All odd numbers are prime. Justify your answer.
9. True or False: All even numbers are composite. Justify your answer.
10. Is 37 prime or composite? Justify your answer.
11. List all of the prime numbers between 20 and 30.
12. List all of the prime numbers between 40 and 60.

Name _____ Date _____

1

Reflect & Review

1. A rectangular gymnasium floor needs to be refinished. If the floor is 90 feet wide and 128 feet long, what is the area that will be refinished?
2. Paul has \$0.88 in change. He wants you to guess which coins he has. He tells you that you need to use the least amount of coins possible. What coins does Paul have?
3. List the next three prime numbers after 31.
4. Find the least common multiple of 18 and 27.

Practice

Construct a factor tree for each number. Then write the prime factorization of each number.

5. 27

6. 100

7. 35

8. 98

9. 24

10. 36

Determine where to place parentheses so that the statement properly demonstrates the associative property.

11. $(4 \times 5) \times 8 = 4 \times 5 \times 8$

12. $3 \times (10 \times 2) = 3 \times 10 \times 2$

Name _____ Date _____

1

Reflect & Review

1. Three fifths of the 1065 students in your school want pizza for lunch. How many students in your school do not want pizza?
2. You are selling energy bars to raise money for a class trip. A energy bar sells for \$1.50. You need to sell enough energy bars to raise \$129. How many energy bars do you need to sell?
3. Your friend asks you to explain the difference between prime and composite numbers. Use complete sentences in your explanation.
4. Use a factor tree to find the prime factorization of 48.
5. Find the least common multiple of 12 and 20.

Practice

Identify the base and exponent in the power.

6. 5^3

7. 2^3

Write the product as a power.

8. $4 \times 4 \times 4 \times 4 \times 4$

9. $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$

Write the prime factorization of the number using powers.

10. 28

11. 36

12. 125

13. 200

Skills Practice

Lesson 1.7

Name _____ Date _____

1

Reflect & Review

1. An art store is displaying small pieces of art on a wall. There are 18 pieces. How many different ways could the art be displayed with an equal amount of paintings in each row?
2. Your summer job is mowing lawns. If you earn \$30 per yard mowed, how many days will it take you to earn \$540?
3. Write the prime factorization of 400 using powers.
4. Use mental math to find the product of 18 and 600.
5. Is 273 prime or composite? Justify your answer.

Practice

6. What is the difference between the greatest common factor and least common multiple of a pair of numbers?

Find the greatest common factor of the numbers.

- | | |
|---------------|---------------|
| 7. 12 and 15 | 8. 20 and 30 |
| 9. 8 and 12 | 10. 42 and 54 |
| 11. 49 and 63 | 12. 80 and 64 |
| 13. 25 and 40 | 14. 48 and 72 |

Skills Practice

Lesson 2.1

Name _____ Date _____

Reflect & Review

1. You and your friends have \$18 for lunch. You buy three sandwiches for \$4 each and three drinks for \$1 each. Assuming that the tax has already been included, do you have enough to pay for your lunch? Show all your work.
2. This summer, you earned \$1920 in 12 weeks. How much money did you earn each week?
3. What are the factors of 64?
4. Use mental math to find the quotient $1200 \div 60$.

2

Practice

5. Identify the numerator of the fraction $\frac{3}{8}$.
6. Identify the denominator of the fraction $\frac{15}{44}$.
7. Write the fraction that has a numerator of 10 and a denominator of 19.
8. Write the fraction that has a denominator of 11 and a numerator of 5.

Complete each statement.

9. $\frac{1}{6}$ is the same as $\frac{1}{12}$ s.
10. $\frac{4}{9}$ is the same as $\frac{1}{18}$ s.
11. $\frac{1}{5}$ is the same as $\frac{1}{25}$ s.

Represent each fraction by drawing the specified figure.

12. $\frac{4}{5}$ of a circle
13. $\frac{1}{4}$ of a rectangle
14. $\frac{7}{9}$ of a square

Name _____ Date _____

Reflect & Review

1. You are reading a book for English class. You can read 15 pages in one hour. The book is 345 pages. How long will it take you to read the book?
2. Seth wants to build a fence to enclose his backyard. The area to fence in has three sides with measurements of 25 feet, 75 feet, and 27 feet. If the fencing that Seth chooses costs \$5 per panel, how much would it cost him to fence in his backyard? (A panel is 4 feet in length and partial panels cannot be purchased.)
3. Use parentheses to make the statement true.
 $4 \times 6 + 16 \div 5 + 3 = 26$
4. Write a fraction with a numerator of 18 and a denominator of 33.

2

Practice

5. Three submarine sandwiches need to be divided equally among 5 people. How much of a sandwich does each person get?
6. You and three of your friends have 3 bags of jewelry beads that you are dividing equally among all of you. How much of a bag does each person get?

Determine whether the solution is reasonable. Use complete sentences to explain why or why not.

7. In celebration of Pi Day (March 14 for 3.14), your math teacher bought 17 pizza pies. Each pizza is cut into 6 slices. There are 30 students in your class. Each student will receive 5 slices of pizza.

Skills Practice

Lesson 2.3

Name _____ Date _____

Reflect & Review

1. Max is baking cookies. He makes 24 cookies from his first batch and 32 cookies from his second batch. He divides the cookies equally into 8 boxes. How many cookies are in each box?
2. Find the greatest common factor of 15 and 40.
3. Write $6 \times 6 \times 7 \times 7 \times 7$ using powers.
4. Jillian wants to purchase a new MP3 player that costs \$125. She earns \$25 each week working after school at a library. How many weeks will it take Jillian to save for the MP3 player?

2

Practice

The lunch menu at your school offers three main dishes: hamburger, hot dog, or pizza. Twenty-four students choose a hamburger, 33 students choose a hot dog, and 47 students choose pizza.

5. What fraction chose a hamburger?
6. What fraction chose a hot dog?
7. What fraction did not choose a hot dog?
8. There are 47 students in Lilly's gym class. Fifteen students in the class prefer volleyball, 28 students prefer track, and 4 students prefer football. What fraction of the students prefer volleyball and football?

One hundred twenty-two thousand people applied for football season tickets at a state university. Forty-four thousand three hundred twenty-one applications got donor-seat tickets, 67,493 applications got regular-seat tickets, and the remaining applications did not get tickets.

9. What fraction got donor-seat tickets?
10. What fraction got regular-seat tickets?

Name _____ Date _____

Reflect & Review

1. Lonnie and Dana are practicing for a basketball free throw contest. Each person attempts 20 free throws. Dana makes 17 and Lonnie makes 14. What fraction of the throws did each person make?
2. Find the greatest common factor of 8 and 18.
3. Use mental math to find the product of 25 and 40.
4. You and three of your friends go to the water park. One admission to the water park is \$15. What is the total cost for all of you to go to the water park?

2

Practice

Fill in the blank so that each pair of fractions are equivalent.

5. $\frac{2}{5} = \frac{6}{\square}$

6. $\frac{5}{8} = \frac{25}{\square}$

7. $\frac{3}{4} = \frac{12}{\square}$

8. $\frac{7}{10} = \frac{42}{\square}$

9. $\frac{8}{9} = \frac{56}{\square}$

10. $\frac{4}{7} = \frac{48}{\square}$

Fill in the blanks so that each equality is true.

11. $\frac{1}{3} = \frac{1 \times \square}{3 \times \square} = \frac{7}{21}$

12. $\frac{4}{5} = \frac{4 \times \square}{5 \times \square} = \frac{12}{15}$

13. $\frac{9}{20} = \frac{9 \times \square}{20 \times \square} = \frac{36}{80}$

14. $\frac{5}{11} = \frac{5 \times \square}{11 \times \square} = \frac{25}{55}$

15. $\frac{8}{15} = \frac{8 \times \square}{15 \times \square} = \frac{48}{90}$

16. $\frac{7}{30} = \frac{7 \times \square}{30 \times \square} = \frac{49}{210}$

Name _____ Date _____

Reflect & Review

1. Heather is placing winning tickets under every third chair at the orchestra concert. The chairs are numbered and there are 300 chairs. As she is placing tickets under the chairs, she becomes confused. She is at chair number 244 and wants to know if she should put a ticket under the chair. She placed the first winning ticket under chair number 3. Should she put a ticket under chair number 244? Explain.

2. Use a factor tree to find the prime factorization for 81.

3. List the first 5 multiples of 5.

4. Find the greatest common factor of 6 and 10.



Practice

Fill in the blank(s) so that each equality is true.

5. $\frac{8}{10} = \frac{4}{\square}$

6. $\frac{15}{30} = \frac{\square}{2}$

7. $\frac{12}{15} = \frac{4}{\square}$

8. $\frac{32}{36} = \frac{32 \div \square}{36 \div \square} = \frac{8}{9}$

9. $\frac{21}{28} = \frac{21 \div \square}{28 \div \square} = \frac{3}{4}$

10. $\frac{18}{27} = \frac{18 \div \square}{27 \div \square} = \frac{2}{3}$

Simplify each fraction.

11. $\frac{20}{25}$

12. $\frac{8}{12}$

13. $\frac{35}{40}$

14. $\frac{24}{64}$

15. $\frac{18}{38}$

16. $\frac{26}{65}$

Skills Practice

Lesson 2.6

Name _____ Date _____

Reflect & Review

1. At a garage sale, Wanda bought 4 books for \$1 each, 2 CDs for \$3 each, and 3 toys for \$2 each. How much money did Wanda spend?
2. During the first series of last night's football game, the quarterback ran for 8 yards, was sacked for a loss of 4 yards, and threw a pass for 5 yards. To earn a first down, ten yards must be gained. Did they earn a first down? Justify your answer.
3. Simplify $\frac{36}{81}$.
4. Use mental math to find the product of 200 and 42.

2

Practice

Use your knowledge of common fractions to compare each pair of fractions.

5. $\frac{3}{8}, \frac{3}{4}$

6. $\frac{7}{10}, \frac{5}{14}$

Find the LCD of each pair of fractions. Then use the LCD to rewrite each fraction. Circle the original fraction that is greater.

7. $\frac{4}{5}, \frac{7}{15}$

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

9. $\frac{5}{6}, \frac{7}{9}$

10. $\frac{1}{3}, \frac{2}{5}$

11. $\frac{1}{2}, \frac{4}{7}$

12. $\frac{3}{8}, \frac{4}{9}$

Name _____ Date _____

Reflect & Review

1. You are training for a marathon. During the first week of training you need to run at least 42 miles in 6 days. If you run the same number of miles each day for the 6 days, how many miles do you have to run each day?
2. Your friend Louie tells you that any positive number multiplied by 2 is a composite number. Is he correct? Justify your answer.
3. Order the fractions $\frac{2}{3}$, $\frac{4}{9}$, $\frac{1}{2}$, $\frac{7}{8}$, $\frac{1}{12}$, and $\frac{13}{14}$ from least to greatest.
4. Find the greatest common factor of 27 and 36.
5. Find the least common multiple of 12 and 16.

3

Practice

Perform the indicated operation(s). Simplify your answer, if possible.

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

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

8. $\frac{3}{16} + \frac{1}{16} + \frac{5}{16}$

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

10. $\frac{10}{11} - \frac{4}{11}$

11. $\frac{4}{15} + \frac{1}{15}$

12. $\frac{14}{17} - \frac{11}{17}$

13. $\frac{7}{10} - \frac{3}{10}$

14. $\frac{4}{7} + \frac{6}{7} - \frac{3}{7}$

Skills Practice

Lesson 3.2

Name _____ Date _____

Reflect & Review

1. You have $\frac{3}{4}$ of a yard of material. You use a piece that is $\frac{1}{4}$ of a yard long for one pillow. How much fabric do you have left? Simplify your answer, if possible.
2. The U.S. Mint is issuing new state quarters. There is one state quarter for each of the 50 states. You collect all 50 quarters and want to display them in a rectangular display with the same number of quarters in each row. How many ways can you arrange the quarters?
3. Find the least common multiple of 9 and 15.
4. Write the prime factorization of 56 using powers.

3

Practice

Perform the indicated operation(s). Simplify your answer, if possible.

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

6. $\frac{1}{7} + \frac{5}{14}$

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

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

9. $\frac{5}{12} - \frac{7}{24}$

10. $\frac{2}{3} + \frac{1}{15}$

11. $\frac{4}{7} + \frac{9}{14} - \frac{1}{2}$


12. $\frac{3}{8} - \frac{1}{4} + \frac{9}{16}$

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

Name _____ Date _____

Reflect & Review

- A bakery sells cookies for \$1 each and slices of pie for \$3 each. If the bakery sells 44 cookies and 15 slices of pie, how much money did the bakery make from the cookies and pie?
- Find the perimeter of the rectangle at the right.
(Hint: The perimeter is equal to twice the length plus twice the width.)



17 in.

9 in.
- Simplify the expression $7 \times 3 + 6 - 2 \times 8 \div 4$.
- Find the sum of 4^2 and 3^3 .

3

Practice

Write each mixed number as an improper fraction.

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

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

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

Write each improper fraction as a mixed number.

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

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

10. $\frac{23}{6}$

11. $\frac{19}{2}$

12. $\frac{13}{4}$

13. $\frac{19}{5}$

Find the sum. Simplify your answer, if possible.

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

15. $\frac{7}{9} + \frac{4}{9}$

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

Name _____ Date _____

Reflect & Review

- You are making gift bags for a third grade class. You have 56 mini granola bars, 14 bouncy balls, and 70 pieces of gum. What is the greatest number of identical gift bags that you can make? How many of each item will be in each bag?
- You want to buy a guitar that costs \$1225. You have saved \$550 and are earning \$45 per week at your current after-school job. If you save your earnings every week, how long will it take before you can buy the guitar?
- Use mental math to find the product of 43 and 8. (*Hint: Think $40 \times 8 + 3 \times 8$.*)
- Find the least common denominator of the fractions $\frac{3}{7}$, $\frac{2}{5}$, and $\frac{1}{2}$.

3

Practice

Find each product. Simplify your answer, if possible.

5. $\frac{3}{4} \times \frac{2}{9}$

6. $\frac{8}{15} \times \frac{1}{4}$

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

8. $\frac{7}{10} \times \frac{6}{35}$

9. $\frac{7}{4} \times \frac{10}{21}$

10. $\frac{11}{12} \times \frac{16}{33}$

11. $\frac{15}{24} \times \frac{6}{20}$

12. $\frac{14}{35} \times \frac{10}{8}$

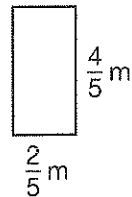
13. $\frac{9}{32} \times \frac{28}{33}$

Name _____ Date _____

Reflect & Review

- There are 20 people running a 5-kilometer race. You have five oranges to give the runners after the race. If the oranges are evenly divided among the runners, how much of an orange should each runner get?

- Find the area of the rectangle shown at the right.
(Hint: The area is equal to the product of the length and the width.)



- Write $\frac{16}{3}$ as a mixed number.

- Write the prime factorization of 96 using a factor tree.

3

Practice

Find each quotient. Simplify your answer, if possible.

5. $\frac{15}{7} \div \frac{10}{14}$

6. $\frac{2}{9} \div \frac{4}{3}$

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

8. $\frac{5}{8} \div \frac{25}{14}$

9. $\frac{14}{32} \div \frac{7}{8}$

10. $\frac{45}{33} \div \frac{15}{11}$

11. $\frac{10}{3} \div \frac{35}{27}$

12. $\frac{24}{5} \div \frac{26}{20}$

13. $\frac{3}{10} \div \frac{12}{5}$

Skills Practice

Lesson 3.6

Name _____ Date _____

Reflect & Review

1. There are 24 students in your math class. If two thirds of the students are girls, how many boys are in your math class?
2. What is $\frac{1}{2}$ of $\frac{2}{3}$?
3. Find the GCF of 14 and 28.
4. Is 43 prime or composite? Justify your answer.

3

Practice

Find each sum. Simplify your answer, if possible.

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

6. $2\frac{5}{9} + 8\frac{2}{9}$

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

8. $6\frac{4}{7} + 4\frac{3}{14}$

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

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

Find each difference. Simplify your answer, if possible.

11. $11\frac{11}{12} - 6\frac{7}{12}$

12. $5\frac{7}{8} - 1\frac{3}{8}$

13. $9\frac{11}{12} - 6\frac{7}{12}$

Name _____ Date _____

Reflect & Review

- On a 20-question quiz, you answered 15 questions correctly. What fraction of questions did you answer correctly? Simplify your answer, if possible.
- Use mental math to find the product of 14 and 280.
- Find the least common multiple of 12 and 8.
- On the first day of a camping trip, it rained $3\frac{1}{4}$ inches. On the second day, it rained $3\frac{2}{3}$ inches. On the third day, it rained $\frac{5}{8}$ inch. What is the total amount of rainfall for the three days?

3

Practice

Find each product. Simplify your answer, if possible.

5. $2\frac{1}{4} \times 1\frac{7}{33}$

6. $3\frac{3}{5} \times 7\frac{1}{2}$

7. $2\frac{5}{8} \times 6\frac{2}{9}$

8. $1\frac{19}{21} \times 2\frac{4}{5}$

9. $2\frac{1}{3} \times 3\frac{3}{26}$

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

Find each quotient. Simplify your answer, if possible.

11. $3\frac{9}{11} \div 1\frac{7}{22}$

12. $4\frac{2}{3} \div 1\frac{13}{15}$

13. $4\frac{4}{5} \div 1\frac{11}{25}$

Skills Practice

Lesson 3.8

Name _____ Date _____

Reflect & Review

1. A classroom is $31\frac{1}{2}$ feet wide. If a desk and the space around it take up $5\frac{1}{4}$ feet, how many rows of desks will fit in the classroom?
2. Which fraction is greater, $\frac{7}{9}$ or $\frac{3}{4}$?
3. Use mental math to find the product of 70 and 300.
4. You answered $\frac{17}{20}$ of the questions on a test correctly. There were 100 questions on the test. How many questions did you answer correctly?

3

Practice

Complete each statement using the correct number of units. Show all your work.

5. 5 inches = _____ feet
6. 2 tons = _____ pounds
7. 5 pints = _____ quarts
8. 72 feet = _____ yards
9. 7 gallons = _____ quarts
10. $2\frac{1}{2}$ pounds = _____ ounces

Complete the statement using $<$, $>$, or $=$. Show all your work.

11. 8 feet 90 inches
12. 7 cups 2 quarts

Name _____ Date _____

Reflect & Review

- Joe has been working on his homework all evening. He finished $\frac{3}{4}$ of his history project and $\frac{5}{8}$ of his English homework. For which class did he complete more work?
- Find the perimeter of the triangle with side lengths of $\frac{6}{7}$ foot, $\frac{2}{3}$ foot, and $\frac{14}{21}$ foot.
- Use mental math to find the product of 0.453 and 100.
- Find the quotient $\frac{9}{35} \div \frac{6}{7}$.

Practice

4

Complete each statement. Show all your work.

5. 500 pennies = ____ dollars 6. 15 dimes = ____ half-dollars 7. 25 nickels = ____ quarters

8. Complete the statement by writing each digit as part of a dollar.

$$\$3.72 = \text{____ dollars} + (7 \times \text{____ of a dollar}) + (2 \times \text{____ of a dollar})$$

Complete each statement to write the decimal in a different form.

- $18.96 = \text{____ tens} + \text{____ ones} + \text{____ tenths} + \text{____ hundredths}$
- $573.17 = \text{____ hundreds} + \text{____ tens} + \text{____ ones} + \text{____ tenths} + \text{____ hundredths}$
- $74.619 = \text{____ tens} + \text{____ ones} + \text{____ tenths} + \text{____ hundredths} + \text{____ thousandths}$
- $94.013 = \text{____ tens} + \text{____ ones} + \text{____ tenths} + \text{____ hundredths} + \text{____ thousandths}$
- $199.67 = \text{____ hundreds} + \text{____ tens} + \text{____ ones} + \text{____ tenths} + \text{____ hundredths}$

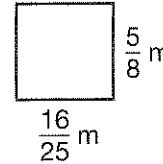
Skills Practice

Lesson 4.2

Name _____ Date _____

Reflect & Review

1. Find the area of the rectangle shown at the right.



2. At Sam's favorite store, he finds a coat on sale for \$72 that was originally \$120. How much money did he save by buying the coat on sale?
3. List the next four consecutive prime numbers after the prime number 31.
4. Find the least common multiple of 9 and 12.
5. Use mental math to find the product of 56 and 20.

Practice

Identify the place value of the specified digit in the number.

6. 410.25; digit: 2 7. 3075.0125; digit: 3 8. 57,498.613; digit: 3

4

Write the number in expanded form and in word form.

9. 520.43

10. 7201.38

Write the decimal in standard form and in word form.

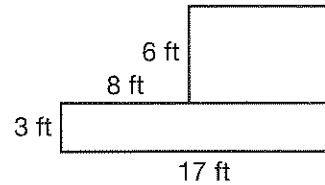
11. $(6 \times 100) + (1 \times 10) + (7 \times 1) + \left(4 \times \frac{1}{100}\right)$

12. $(4 \times 10,000) + (7 \times 100) + (2 \times 10) + (9 \times 1) + \left(5 \times \frac{1}{10}\right) + \left(3 \times \frac{1}{1000}\right) + \left(6 \times \frac{1}{10,000}\right)$

Name _____ Date _____

Reflect & Review

1. James and Ken are landscaping for a business in town. The drawing at the right represents the lawn. Find the area of the lawn that James and Ken are landscaping.



2. Tosin has worked $14\frac{1}{2}$ hours this week. Next week she wants to work 25 hours. How many more hours will she work next week than she worked this week?

3. Evaluate the expression $19 - 25 \div 5 + 7 - (18 - 12)$.

4. Simplify $\frac{14}{35} \times \frac{15}{16} \div \frac{5}{4}$.

Practice

4

Write each decimal as a mixed number. Simplify your answer, if possible.

5. 21.04 6. 14.002 7. 200.205

Round each whole number to the given place value.

8. 5736 to the nearest ten 9. 84,521 to the nearest thousand 10. 244 to the nearest hundred

11. In the table, round each decimal to the given place value.

	Round to the nearest hundred	Round to the nearest ten	Round to the nearest one	Round to the nearest tenth	Round to the nearest hundredth	Round to the nearest thousandth
4735.1628						
258.0751						
632.9516						

Name _____ Date _____

Reflect & Review

- Your class orders 27 sub sandwiches. There are 24 students in your class. Your teacher places your class in groups of 4 and divides the sub sandwiches evenly among the groups. How many sub sandwiches will each group receive? How much will each group member receive?
- Order the numbers 0.48 , $\frac{1}{10}$, 0.85 , $\frac{3}{4}$, $\frac{1}{2}$, $\frac{8}{10}$, and 0.25 from least to greatest.
- You are baking cookies and want to double the recipe. The recipe calls for $2\frac{1}{4}$ cups of flour and $\frac{3}{4}$ cup of sugar. How many cups of each ingredient will you need when you double the recipe?
- Evaluate $\frac{7}{4} + \frac{8}{3} - \frac{1}{2}$. Simplify your answer, if possible.

4

Practice

Find each sum or difference.

- | | | |
|---------------------|------------------------|-----------------------|
| 5. $54.3 + 22.9$ | 6. $10.326 + 62.931$ | 7. $19.71 + 33.55$ |
| 8. $64.67 - 14.15$ | 9. $194.337 - 123.015$ | 10. $22.6 - 10.2$ |
| 11. $473.44 + 94.2$ | 12. $78.321 - 39.7$ | 13. $628.907 + 129.8$ |

Skills Practice

Lesson 4.5

Name _____ Date _____

Reflect & Review

1. Jessica is buying birthday presents for her twin nieces. She has \$64 to spend. So far she has purchased two swimsuits for \$12.50 each and two pairs of flip-flops for \$4.63 each. She wants to buy each twin a basketball that costs \$15.33. Does Jessica have enough money to purchase the basketballs?
2. Find the area of a triangle that has a height of 4 feet and a base of $6\frac{1}{2}$ feet.
(Hint: The area is equal to one half of the length of the base multiplied by the height.)
3. Simplify $\frac{15}{33} \times \frac{25}{55}$.
4. Find the greatest common factor of 24 and 56.

Practice

Find each product.

4

5. 3.2×2.01

6. 4.6×0.05

7. 5.04×1.03

8. 2.17×0.04

9. 7.34×1.6

10. 301.2×5.8

11. 8.4×10.3

12. 17.08×2.4

13. 11.3×0.07

Name _____ Date _____

Reflect & Review

1. Draw a circle. Use it to represent the fraction $\frac{7}{8}$.
2. Ten pizzas are divided evenly among 32 people. What fraction of a pizza does each person get? Justify your answer.
3. Simplify $\frac{3}{16} + \frac{3}{4} - \frac{3}{8}$.
4. Find the product of $7\frac{3}{5}$ and $2\frac{1}{2}$.

Practice

Find each quotient.

5. $8\overline{)46}$

6. $9\overline{)43.2}$

7. $4\overline{)9.52}$

8. $3.5\overline{)73.5}$

9. $0.2\overline{)8.36}$

10. $8\overline{)1.2}$

11. $0.98 \div 0.7$

12. $3.21 \div 0.3$

4

Skills Practice

Lesson 4.7

Name _____ Date _____

Reflect & Review

1. Glennis runs 5.75 miles per week and swims 3.5 miles per week. How many miles of exercise does she get each week?
2. Shelly is traveling to her grandmother's house that is 324 miles away. If her car gets 23 miles per gallon, how many gallons of gasoline will she use on the trip?
3. Find the least common multiple of 18 and 24.
4. Write $8\frac{7}{9}$ as an improper fraction.

Practice

Convert each measure. Show all your work.

5. 30 hectometers = _____ kilometers
6. 18 millimeters = _____ meters
7. 5.32 decimeters = _____ hectometers
8. 18.7 liters = _____ milliliters
9. 0.1 meters = _____ centimeters
10. 15 centiliters = _____ kiloliters
11. 3.2 milligrams = _____ grams
12. 0.09 kilograms = _____ centigrams
13. 15.5 decimeter = _____ kilometers
14. 3.67 millimeters = _____ centimeters

4

Name _____ Date _____

Reflect & Review

1. Gill wants a CD player that costs \$135.49. The sales tax is \$10.16. How much money does he need to purchase the CD player including tax?
2. Hannah wants to place a small fence border around her rectangular flower bed. The dimensions of the sides are 12.5 feet and 18.8 feet. How much fencing will she need?
3. Write 452.89 in expanded form.
4. Find the difference $634.27 - 421.8$.

Practice

Write each statement as a ratio in two ways, (a) as a fraction and (b) using a colon.

5. Thirteen out of twenty boys like football.
6. Sue answered 19 out of 25 questions correctly.
7. Jake made 12 out of 18 putts on the golf course.
8. Pat ate 3 out of 8 pieces of pizza.
9. Kevin made 15 baskets out of 26 attempts at the basketball game.
10. Matt threw 30 strikes out of 43 pitches.
How many pitches were not strikes?
11. Phil caught one out of every three passes.
How many passes did he miss?
12. Ingra answered 12 out of 20 phone calls.
How many phone calls did she miss?

Name _____ Date _____

Reflect & Review

- Kathy enjoys working in her vegetable garden. She wants to hire you to water the plants while she is out of town for the weekend. She waters each section of the garden for $\frac{1}{3}$ hour. There are 15 sections that need to be watered. Kathy offers to pay you \$5 per hour. How much will you make?
- Ty is selling programs at a hockey game. For every program he sells, \$0.25 goes to the Children's Hospital. If he sells 435 programs, how much money will the Children's Hospital receive?
- Use mental math to simplify $45 + 17 - 6$.
- Round 465,902 to the nearest ten thousand.

Practice

- Jamie and Quinn are at the batting cages. With each turn, the pitching machine pitches 20 balls. Jamie hits 12 pitches and Quinn hits 14 pitches. Write a proportion for each baseball player in two ways, (a) using fractions and (b) using colons.

5

For each proportion, find the equivalent rate.

6. $\frac{46 \text{ miles}}{3 \text{ gallons}} = \frac{? \text{ miles}}{6 \text{ gallons}}$

7. $\frac{12 \text{ trees}}{5 \text{ acres}} = \frac{36 \text{ trees}}{? \text{ acres}}$

8. $\frac{24 \text{ ounces}}{8 \text{ gallons}} = \frac{6 \text{ ounces}}{? \text{ gallons}}$

Determine the unknown quantity.

9. $8 : 20 :: ? : 5$

10. $9 : 18 :: 4 : ?$

11. $6246 : 6 :: 2082 : ?$

Name _____ Date _____

Reflect & Review

- Devon loves to cycle. On Monday she rode 4.75 kilometers, on Tuesday she rode 3.8 kilometers, on Thursday she rode 6.2 kilometers, and on Friday she rode 8.3 kilometers. How many kilometers did she ride in all?
- Six oranges cost \$3.99. How much does one orange cost? Round your answer to the nearest cent.
- Simplify $(15)(6) - 8 \div 2 + 2 - 14$.
- Find the quotient $\frac{12}{25} \div \frac{6}{15}$.
- Convert 467 centimeters to meters.

Practice

Complete each statement to write the rate as a unit rate.

- | | |
|---|--|
| 6. $\frac{\$54}{3 \text{ hours}} = \frac{\$(54 \div \square)}{(3 \div \square) \text{ hours}} = \frac{\$\square}{1 \text{ hour}}$ | 7. $\frac{320 \text{ min}}{20 \text{ days}} = \frac{(320 \div \square) \text{ min}}{(20 \div \square) \text{ days}} = \frac{\square \text{ min}}{1 \text{ day}}$ |
| 8. $\frac{32 \text{ people}}{8 \text{ cars}} = \frac{(32 \div \square) \text{ people}}{(8 \div \square) \text{ cars}} = \frac{\square \text{ people}}{1 \text{ car}}$ | 9. $\frac{500 \text{ apples}}{25 \text{ trees}} = \frac{(500 \div \square) \text{ apples}}{(25 \div \square) \text{ trees}} = \frac{\square \text{ apples}}{1 \text{ tree}}$ |
| 10. $\frac{418 \text{ books}}{22 \text{ shelves}} = \frac{(418 \div \square) \text{ books}}{(22 \div \square) \text{ shelves}} = \frac{\square \text{ books}}{1 \text{ shelf}}$ | 11. $\frac{700 \text{ pens}}{20 \text{ boxes}} = \frac{(700 \div \square) \text{ pens}}{(20 \div \square) \text{ boxes}} = \frac{\square \text{ pens}}{1 \text{ box}}$ |

Write the rate as a unit rate.

- | | |
|--|--|
| 12. $\frac{72 \text{ flowers}}{8 \text{ vases}}$ | 13. $\frac{4000 \text{ chocolate chips}}{250 \text{ cookies}}$ |
|--|--|

Name _____ Date _____

Reflect & Review

- Yanni and Freeda bought 104 beads at a craft store. One fourth of the beads are clear glass, one half of the beads are solid-colored glass, and one fourth of the beads are multi-colored glass. How many of each type of bead do they have?
- At the state fair, Paula wants to buy some homemade strawberry jelly. After looking around, she decides that she wants either Sally's Strawberry Jelly (16 ounces for \$3.20) or Josh's Jelly (24 ounces for \$5.28). Which person should Paula buy from to get the most for her money? Justify your answer.
- Find the LCM of 6 and 16.
- Show that the proportion $\frac{8}{9} = \frac{40}{45}$ is true.

Practice

Solve each proportion. Show all your work.

5. $\frac{35 \text{ staples}}{7 \text{ walls}} = \frac{x \text{ staples}}{3 \text{ walls}}$

6. $\frac{124 \text{ computers}}{4 \text{ computer labs}} = \frac{620 \text{ computers}}{x \text{ computer labs}}$

7. $\frac{8 \text{ acres}}{\$24,000} = \frac{100 \text{ acres}}{\$x}$

8. $\frac{\$5.52}{24 \text{ ounces}} = \frac{\$x}{32 \text{ ounces}}$

9. $\frac{45 \text{ yards}}{16 \text{ carries}} = \frac{x \text{ yards}}{4 \text{ carries}}$

10. $\frac{736 \text{ grapes}}{8 \text{ vines}} = \frac{92 \text{ grapes}}{x \text{ vines}}$

11. If thirty-two cans will fit into four boxes, how many boxes will it take to pack 104 cans?

Skills Practice

Lesson 6.2

Name _____ Date _____

Reflect & Review

1. There are 3545 students enrolled at a local high school. Two-fifths of the students have a driver's license. How many of the students have a driver's license?
2. There are 52 playing cards in a deck. There are thirteen cards in each of the four suits. What is the ratio of the number of cards in two of the suits to the number of cards in the deck?
3. Find the least common multiple of 6 and 8.
4. Write the prime factorization of 54.
5. Use mental math to simplify $14 \times 22 - 100$.

Practice

Find the percent of the number.

6. 1% of 380 7. 10% of 430 8. 100% of 600

Use a benchmark percent to find each percent. Show all your work.

9. 25% of 200 10. 38% of 72 11. 60% of 140
12. 20% of 98 13. 72% of 300 14. 13% of 145
15. 9% of 180 16. 42% of 60 17. 99% of 550

Skills Practice

Lesson 6.3

Name _____ Date _____

Reflect & Review

1. The streets running east and west in Norman, Oklahoma, are named in order as multiples of twelve. If you begin on 12th Street and need to go south to get to 108th Street, how many east-west streets would you pass?
2. Lexi wants to buy a video camera. She has saved \$150. At her babysitting job, she makes \$10 per week. The video camera that Lexi wants costs \$335. How long will it take her to save enough money to buy the video camera?
3. Use a benchmark percent to find 30% of 150.
4. Find the greatest common factor of 16 and 28.
5. Use mental math to find the difference $385 - 221$.

Practice

Write and solve a proportion to find the percent of the number. Show all your work.

- | | | |
|----------------|----------------|------------------|
| 6. 30% of 60 | 7. 18% of 84 | 8. 8% of 1200 |
| 9. 120% of 75 | 10. 49% of 58 | 11. 25% of 367 |
| 12. 15% of 240 | 13. 75% of 654 | 14. 145% of 2000 |

Name _____ Date _____

Reflect & Review

1. Candace is looking for a new apartment. She has budgeted one fourth of her paycheck each month to spend on rent. Each month she earns \$2450. How much can she spend on an apartment and stay within her budget?
2. You are buying a guitar for \$400. The sales tax in your state is 5%. How much sales tax will you be charged?
3. True or False: An odd number multiplied by an odd number is always odd.
4. Find the product of 0.36 and 150.
5. Use mental math to find the quotient $565 \div 5$.

Practice

Find the original price if the sale price given is 75% of the original price.

6. Sale price: \$60
7. Sale price: \$150
8. Sale price: \$225

Find the markup price if the original price given is 90% of the markup price.

9. Original price: \$36
10. Original price: \$108
11. Original price: \$315

Skills Practice

Lesson 6.5

Name _____ Date _____

Reflect & Review

1. Gil is 47 years old. He has spent two-fifths of his life living in Europe. How many years has he spent in Europe?
2. You are in charge of fundraising for your class trip to Washington, D.C. The total price of the trip is \$32,000 for your class. The fundraiser you have chosen gives you 40% of all sales. How much does your class have to sell to earn \$32,000 for the trip?
3. Simplify $12 - [8 + 4 \times (-6)] + 3$
4. Find the least common multiple of 8, 12, and 18.
5. Is 38 prime or composite? Justify your answer.

Practice

Use a proportion to find the percent.

6. What percent of 50 is 20?
7. 15 is what percent of 60?
8. 65 is what percent of 520?
9. What percent of 120 is 6?
10. What percent of 80 is 70?
11. 28 is what percent of 320?

Find the amount of simple interest earned for each deposit.

12. Principal: \$500
Interest rate: 4%
Number of years: 20
13. Principal: \$450
Interest rate: 3%
Number of years: 15
14. Principal: \$1000
Interest rate: 3%
Number of years: 25

Name _____ Date _____

Reflect & Review

1. Donnie is a sales representative for a chemical company. He makes 25% commission on all sales. During the month of May, he sold \$5600 in chemicals to businesses. How much money did he make on commission?
2. Is 321 divisible by 3? Justify your answer.
3. Round 567.3489 to the nearest thousandth.
4. Find the product of 65.38 and 12.3.
5. Find the quotient $785 \div 15$.

Practice

Find the percent increase.

6. Original price: \$45
Current price: \$53.10
7. Original price: \$120
Current price: \$129.60
8. Original price: \$124,600
Current price: \$187,523
9. Original price: \$65,000
Current price: \$86,450

Find the percent decrease.

10. Original price: \$800
Sale price: \$592
11. Original price: \$1200
Sale price: \$1008
12. Original price: \$275
Sale price: \$170.50
13. Original price: \$80
Sale price: \$46.40

Name _____ Date _____

7

Reflect & Review

- Henry receives $\frac{1}{8}$ of an inheritance. What percent of the inheritance did he receive?
- Jake spent $1\frac{3}{4}$ hours doing homework, $\frac{1}{2}$ hours eating, and $1\frac{1}{4}$ hours playing video games.
Jake got home from school at 4:30 P.M. What time did he finish all three tasks?
- Simplify $\frac{7}{8} + \frac{6}{4} - \frac{1}{2}$.
- Find the sum of 45.38 and 21.742.
- List all the factors of 30.

Practice

Write each gain or loss as an integer.

- gain of 10 yards
- loss of 4 yards
- gain of 18 yards

Complete each statement. Use the symbol $>$ for greater than and the symbol $<$ for less than.

9. -5 -8

10. -3 0

11. 5 -5

Read the problem and answer the questions.

- The temperature at 9:00 A.M. was 40° . The temperature at 2:00 P.M. was -10° .
What was the change in temperature?
- Sam had \$120 in her savings account at the beginning of the month. She withdrew \$50. Then she deposited \$80. How much money does she have in her account now?
- You began your hike at 30 feet below sea level. You are now at 200 feet. How far have you hiked?

Name _____ Date _____

7

Reflect & Review

- Over a four-month period, a company makes a profit of \$750 during the first month, a loss of \$175 during the second month, a loss of \$10 during the third month, and a profit of \$900 during the fourth month. Write the amount of money made each month as an integer.
- Nichole, Ann, and Dawn want to drive to an amusement park. The park is 325 miles from where they live. If they drive an average of 65 miles per hour, how long will it take them to drive to the park?
- Solve the proportion $\frac{15}{63} = \frac{5}{x}$.
- Convert 3245 milligrams to grams.
- Determine whether the fractions $\frac{24}{36}$ and $\frac{6}{9}$ are equivalent. Justify your answer.

Practice

Find each sum.

- $5 + (-12)$
- $145 + (-100)$
- $-19 + (-37)$
- $-13 + 9$
- $68 + (-42)$
- $-13 + (-19)$
- $-14 + 6 + (-13)$
- $34 + (-6) + (-22)$
- $-12 + (-8) + (-21)$
- $60 + 44 + (-133)$
- $-1 + 6 + (-7) + 3$
- $315 + (-21) + (-315) + 45$

Name _____ Date _____



Reflect & Review

1. Olan answered 75% of the problems correctly on his math test. If there were 64 problems on the test, how many problems did he answer correctly?
2. There are 12 students on the school improvement team. For lunch, they order 5 pizzas. They are working in groups of 3. How should the pizzas be divided between the groups?
3. Write the temperature 15 degrees below zero as an integer.
4. Find the product of 5.2 and 8.
5. Find the difference $\frac{3}{5} - \frac{9}{4}$.

Practice

Find each difference. Then write a sentence that describes the movement on the number line that you could use to solve the problem.

6. $7 - (-6)$ 7. $-5 - (-13)$ 8. $22 - (-6) - 13$

Find each difference.

9. $188 - (-42)$ 10. $-304 - 22$ 11. $83 - 15$
12. $-173 - 47$ 13. $31 - (-25) + 18 - 3$ 14. $-48 - 21 + 10 - (-3)$

Name _____ Date _____

7

Reflect & Review

- Ray bought a set of golf clubs and accessories. He paid \$330 for a set of clubs, a bag, and a golf towel. If the tax on the items is 9% of the original price, how much will it cost him to buy the clubs and accessories?
- You are stacking five books. The books have thicknesses of $2\frac{1}{8}$ inches, $4\frac{2}{5}$ inches, $1\frac{3}{4}$ inches, 3 inches, and $2\frac{3}{10}$ inches. How tall is the stack?
- Use mental math to find the sum of 4220 and 8361.
- Find the sum $1.28 + 17.3 + 22.654$.
- Find all the prime numbers between 20 and 40.

Practice

Write each number as a power with a negative exponent. Then find the value of the power.

6. $\frac{1}{7^2}$

7. $\frac{1}{4^3}$

8. $\frac{1}{10^4}$

Write each number using scientific notation.

9. 0.000023

10. 0.00763

11. 0.0001948

Write each number in standard form.

12. 8.439×10^{-6}

13. 3.582×10^{-8}

14. 5.629×10^{-2}