Complete each division. Check your answer.

Solve. Use estimation to check the solution.

- 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?

Write each fraction as a decimal.

$$\frac{2}{10}$$

Remembering

$$2\frac{556}{1,000}$$

$$\frac{6}{100}$$

4
$$\frac{17}{100}$$

5
$$\frac{23}{1,000}$$

6
$$\frac{5}{1,000}$$
 —

$$0\frac{1}{10}$$

Solve.

Solve.

- **16** Sarah is dividing pies into eighths. She has 4 pies. How many eighths will she have?
- 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?
- **13 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?

Divide.

1 39)2,886

Homework

- **2** 81)7,533
- **3** 68)4,967
- **4** 72)4,968

- **5** 28)2,520
- **6** 33)1,287
- **7** 46) 1,426
- **8** 55) 990

Solve.

- 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?
- 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?
- 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?

Solve. Use any method.

Show your work.

1 68 × 21

2 36 × 92 3 25 × 44

Complete each division. Check your answer.

4 5)1,267

5 3)1,374

6 7)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?

Divide.

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?

Tarmer 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?

Write a division word problem using 7,903 and 26.

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Remembering

Multiply. Simplify first if you can.

$$\mathbf{1} \quad \frac{3}{4} \cdot \frac{12}{13} = \underline{}$$

$$2 \frac{1}{4} \cdot \frac{3}{7} = \underline{ }$$

3
$$\frac{7}{8} \cdot \frac{4}{5} =$$

6
$$\frac{1}{5} \cdot \frac{5}{6} =$$

Complete the equations.

7
$$0.65 \times 10^{1} =$$
 9 $2.45 \times 10^{1} =$ 9 $2.45 \times 10^{1} =$

8
$$0.8 \times 10^1 =$$

$$9 \ 2.45 \times 10^1 =$$

$$0.65 \times 10^2 =$$

$$0.8 \times 10^2 =$$

$$2.45 \times 10^2 =$$

$$0.65 \times 10^3 =$$

$$0.8 \times 10^3 =$$

$$2.45 \times 10^3 =$$

Divide.

- **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.

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 round mixed decimal remainder only only

2 Bananas cost 89 cents each at the fruit stand. Isabel has \$11.75. How many bananas can she buy?

whole round mixed 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 round mixed 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 round mixed remainder number up number 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 round mixed decimal remainder only

UNIT 5 LESSON 4

Remembering

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

1 0.6 \(\cap 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) 5,745

8 54)4,806

9 36)2,597

Solve.

- 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?
- Stretch Your Thinking Write and solve a division word problem for which the remainder is the answer.

1 7 3,990

2 44)2,156

3 5)7,003

4 28 1,763

5 54)4,458

6 6)3,039

Solve.

Show your work.

- 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?
- 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?

UNIT 5 LESSON 5

Remembering

Multiply.

Solve. Give your answer in simplest form.

12
$$6 \div \frac{1}{3} =$$

$$\frac{5}{6} + \frac{5}{8} = \underline{\hspace{1cm}}$$

$$\mathbf{4} \quad 6\frac{3}{4} \cdot \frac{1}{6} = \underline{}$$

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 round mixed remainder number decimal number only up only

16 Stretch Your Thinking I am a number less than 100. When you divide me by 2, my remainder is 1. When you divide me by 25, my remainder is 2. What numbers could I be?

Solve.

 $9)\overline{6.57}$

2 5)36.41

3 4)9.584

4 6)207.9

5 23) 153.87

6 7)654.5

7 45)431.1

8 2)7.006

9 16)5.76

Solve.

- 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?

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.

Divide.

12 Stretch Your Thinking What part of this problem needs to be changed to make it correct? Explain how you know. $46 \div 8 = 6.75$

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)63
- **7** 0.08)72
- **8** 0.007)42
- $9 \ 0.6)\overline{420}$

- **10** 0.4)372
- **11** 0.6)534
- **12** 0.26)884
- **1** 0.71) 1,136

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.

Solve.

Stretch Your Thinking Look at the division problem
 112 ÷ 0.056. Without solving, how many zeros will be
 in the quotient? How do you know?

Divide.

10.07)4.2

(2) 0.8)2.4

3 0.05)4.8

4 0.24 2.064

5 Circle the division that does *not* have the same answer as the others.

 $54 \div 6$ $5.4 \div 0.6$

 $0.54 \div 0.6$ $0.54 \div 0.06$

 $0.054 \div 0.006$

Show your work. Solve.

- 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?
- 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

Remembering

Name

Date

Round to the nearest tenth.

Round to the nearest hundredth.

Solve.

Solve.

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.

Divide.

$$(10.7)\overline{35}$$

Solve. Explain how you know your answer is reasonable.

Show your work.

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?

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?

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?

Add or subtract.

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

$$2\frac{3}{5} + 5\frac{3}{10}$$

Name

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

$$\begin{array}{r}
4 & 7\frac{3}{10} \\
 & + 2\frac{1}{5}
\end{array}$$

6 12
$$-5\frac{2}{3}$$

Find each product.

Divide.

$$(0.9)\overline{6.3}$$

19 Stretch Your Thinking Write a real world division problem for which you would drop the remainder.

Multiply or divide.

Homework

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?

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.

Raisins cost \$0.97 per pound. Michael bought \$15.52 worth of raisins. How many pounds of raisins did he buy?

Multiply.

Divide.

Tell whether you need to multiply or divide. Then solve.

- 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?
- Stretch Your Thinking Write a division word problem that requires dividing two decimals to solve. Write a multiplication equation to check your answer.

Dividing numbers involves dividends, divisors, and quotients.

quotient divisor) dividend

Write a division problem (including the quotient) that satisfies all three statements.

- 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.
- The dividend is a decimal in hundredths.

 The divisor is a decimal in hundredths.

 The quotient is a two-digit whole number.

Add or subtract.

Remembering

8

Complete each fraction box.

$$\frac{2}{7} \text{ and } \frac{1}{4}$$
>
+
-

Multiply or divide.

37.5 × 3.5

0.63 × 0.27

- **11** 0.93)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: _____