Add Dollars and Cents

Find the sum.



- 21. The bill for tonight's dinner is \$56.85. Mr. Asham adds a \$10.50 tip. How much does Mr. Asham pay in all?
- 22. Maria buys a video game for \$25.99 and batteries for \$7.30. What is the total cost for these two items?

Subtract Dollars and Cents

Find the difference.



- 21. A soccer ball costs \$17.99. Karla hands the cashier \$20.00. How much change does she get back?
- **22.** Hal earned \$56.50 dog sitting last month. Liz earned \$87.00. How much more did Liz earn than Hal?

3. $(48 \div 6) + 5$

6. $(40 \div 10) + 11$

9. $6 + (24 \div 8) - 3$

12. $15 + 6 \times (8 \div 4)$

Order of Operations

Follow the order of operations to find the value of the expression. Show each step.

1.
$$3 + (18 \times 2) \div 3$$

4. $(9 \times 4) + 6$

5.
$$(10 + 5) \times 9$$

2. $(20 - 8) \times 2$

7.
$$5 + (21 \div 3) \times 5$$

8.
$$7 \times 4 + (15 \div 3)$$

10.
$$43 - 28 + (12 \div 2)$$
 11. $(13 \times 2) - 2 - 5$

11.
$$(13 \times 2) - 2 - 5$$

- 13. Each carton has 12 eggs. There are 2 full cartons in the refrigerator. Margot uses 3 eggs to make a quiche. How many eggs are left?
- **14.** There are 6 rows in the parking lot. Each row has 12 parking spaces. At 9 o'clock the lot is full. An hour later, there are 15 empty spaces. How many cars are in the lot an hour later?

Divide by Multiples of Ten

Divide. Use a pattern to help.

1.
$$1,500 \div 30 = 50$$

1.
$$1,500 \div 30 = 50$$
 2. $2,000 \div 20 = 3$ **3.** $4,000 \div 80 = 3$

3.
$$4.000 \div 80 =$$

$$15 \div 3 = 5$$
, so $150 \div 30 = 5$.
 $1,500 \div 30 = 50$

4.
$$6,000 \div 30 =$$

4.
$$6,000 \div 30 =$$
 5. $9,000 \div 30 =$ **6.** $8,000 \div 40 =$ **9.**

8.
$$3,500 \div 50 =$$

7.
$$1,000 \div 20 =$$
 _____ **8.** $3,500 \div 50 =$ _____ **9.** $8,100 \div 90 =$ _____

10.
$$6,400 \div 80 =$$
 ______ **11.** $2,400 \div 60 =$ _____ **12.** $6,000 \div 60 =$ _____

13.
$$2,100 \div 70 =$$
 ______ **14.** $5,400 \div 90 =$ _____ **15.** $2,700 \div 30 =$ _____

Problem Solving REAL WORLD

- 16. A food bank has 3,600 boxes of food. The boxes will be loaded equally onto 60 trucks. How many boxes of food will be on each truck?
- 17. A stadium has a seating capacity of 8,000. Suppose it is divided into 20 equal sections. How many seats are in each section? Explain.

Houghton Mifflin Harcourt Publishing Company

Model Division with 2-Digit Divisors

Use base-ten blocks to divide.

14

10.
$$154 \div 11$$
 11. $39 \div 13$

- 13. A theater has 126 seats. The theater has 14 rows with the same number of seats in each row. How many seats are in each row?
- 14. Leila has \$360 in twenty-dollar bills. How many twenty-dollar bills does she have?

Place Value Through Millions

Read and write the number in two other forms.

1. 4,520,696 four million, five hundred twenty thirty-one million, six thousand, one hundred fifty **3.** 80,000,000 + 40,000 + 900 + 60

thousand, six

hundred ninety-six;

4,000,000 + 500,000

+20,000+600

+90+6

Write the value of the underlined digit.

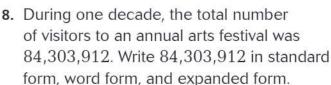
4. <u>4</u>,520,696

5. <u>7</u>9,241,043

6. <u>2</u>,138,824

7. <u>6</u>3,446,364

Problem Solving | REAL WORLD



lard

9. In 2007, the population of the United States was estimated to be 31,139,947. Which place value does the underlined digit represent in this number?

Decimals and Place Value

Read and write the decimal in two other forms.

1. 7.32

seven and thirty-two hundredths; 7 + 0.3 + 0.02

two	and	six te	enths		

3.	20	+	5	+	0.8	+	0.01
----	----	---	---	---	-----	---	------

4.	86.04			
	52.			

Write the value of the underlined digit.

6. 3.<u>2</u>

10. 0.9

Problem Solving REAL WORLD

0.04



Use the table below for 13 and 14.

Three runners finished a foot race with the following times.

Foot Race Times

Runner	Time (in seconds)
Erika	15.46
Andre	14.89
Conner	15.08

- **13.** Which runner finished the race with a time that has the digit 8 in the hundredths place?
- **14.** What is Erika's time written in expanded form?

Round Decimals

Round to the nearest dollar or to the nearest whole number.



- 21. Camden spends \$18.25 at the driving range. How much money did Camden spend, rounded to the nearest dollar?
- 22. Jolie bought 3.75 pounds of turkey at the deli. About how many pounds of turkey did Jolie buy?

Place Value to Compare Decimals

Compare the decimals. Write <, >, or =.

Use a place-value chart to order the decimals from least to greatest.

- **19.** Veronica drank 0.5 liter of water. Hector drank 0.3 liter of water. Who drank less water?
- **20.** Abby spent \$6.36 on her lunch and Colby spent \$6.63 on his lunch. Who spent less money on lunch—Abby or Colby?

Decompose Multiples of 10, 100, 1,000

Decompose each number.

Correct the error. Write the correct decomposition.

10.
$$980 = 98 \times 100$$

11.
$$1,700 = 17 \times 1,000$$
 12. $8,000 = 80 \times 100$

12.
$$8,000 = 80 \times 100$$

13.
$$700 = 70 \times 100$$

14.
$$6.400 = 64 \times 1.000$$

14.
$$6,400 = 64 \times 1,000$$
 15. $5,000 = 50 \times 1,000$

16.
$$920 = 92 \times 100$$

17.
$$7,700 = 77 \times 1,000$$
 18. $280 = 28 \times 100$

18.
$$280 = 28 \times 100$$

Problem Solving REAL WORLD

19. There are 240 students in the middle-school band. The band director is dividing the students into groups of 10. Into how many groups will the band director divide the students?

Number Patterns

Describe the pattern. Then find the next two numbers in the pattern.

Determine the pattern and use it to fill in the blanks.

Problem Solving REAL WORLD

11. Pippen works at an aquarium. Each month, she counts the number of fish in one of the aquariums. She records the total number of fish in the table below. If the pattern continues, how many fish will be in the aguarium in Months 6 and 7?

Month	1	2	3	4	5
Number of Fish	4	8	16	32	64

Add Related Fractions

Add. Use fraction strips to help.

1.
$$\frac{1}{2} + \frac{1}{8} =$$

1. $\frac{1}{2} + \frac{1}{8} =$

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

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

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

3.
$$\frac{2}{10} + \frac{1}{5} =$$

4.
$$\frac{2}{3} + \frac{1}{6} =$$

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

6.
$$\frac{4}{12} + \frac{2}{3} =$$

7.
$$\frac{4}{10} + \frac{1}{2} =$$

8.
$$\frac{1}{2} + \frac{3}{6} =$$

Problem Solving REAL WORLD

9. The Lin family bought a dozen bagels. They ate $\frac{1}{4}$ of the bagels today and $\frac{5}{12}$ of the bagels yesterday. What fraction of the bagels did they eat in all? Explain how you found your answer.

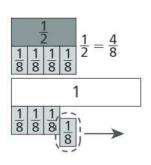
10. The Smith family ate $\frac{3}{5}$ of a pizza for dinner and $\frac{2}{10}$ of the pizza for lunch the next day. How much of the pizza did they eat in all? Explain how you found your answer.

GRP12

Subtract Related Fractions

Subtract. Use fraction strips to help.

1.
$$\frac{1}{2} - \frac{1}{8} = \frac{3}{8}$$



2.
$$\frac{5}{6} - \frac{1}{3} =$$

3.
$$1 - \frac{3}{5} =$$

4.
$$\frac{3}{4} - \frac{3}{12} =$$

5.
$$\frac{3}{5} - \frac{2}{10} =$$

6.
$$\frac{7}{8} - \frac{2}{4} =$$

7.
$$\frac{4}{6} - \frac{2}{3} =$$

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

- 9. Fabia buys $\frac{5}{8}$ pound of red grapes and $\frac{1}{4}$ pound of green grapes. How many more pounds of red grapes does she buy? Explain how you found your answer.
- **10.** Geraldo has $\frac{9}{12}$ mile left to hike to reach the end of the trail. He hikes $\frac{2}{3}$ mile. What fraction of a mile does he have left to hike? Explain how you found your answer.

Compare Fraction Products

Complete each statement with greater than or less than.

1.
$$\frac{2}{4} \times 3$$
 will be **less than** 3. 2. $\frac{3}{8} \times 2$ will be $\frac{3}{8}$.

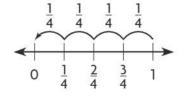
7.
$$3 \times \frac{3}{5}$$
 will be _______ 3. **8.** $5 \times \frac{2}{3}$ will be ______

- 9. Jen is making 3 loaves of banana bread. She needs $\frac{3}{4}$ cup sugar for each loaf. Will she need more or less than 3 cups of sugar to make all 3 loaves? Explain.
- **10.** Tafua exercises for $\frac{5}{6}$ hour every day. After 2 days, will Tafua have exercised for less than or more than $\frac{5}{6}$ hour? Explain.

Repeated Subtraction with Fractions

Use repeated subtraction to divide.





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

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

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

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

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

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

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

Problem Solving REAL WORLD

9. Harold has 4 cups of trail mix. He wants to give $\frac{1}{3}$ cup trail mix to each camper in his group. There are 8 campers in his group. Does he have enough trail mix for all the campers? Explain.

10. Marita is cutting rolls of ribbon that are 3 feet long into $\frac{1}{2}$ -foot pieces. She needs fifteen $\frac{1}{2}$ -foot pieces for a project. She has 3 rolls of ribbon. Does she have enough to cut 15 pieces? Explain.

Fractions and Division

Write the division problem as a fraction. Write each fraction greater than ${\bf 1}$ as a whole number or mixed number.

Problem Solving REAL WORLD

10. There are 13 bagels in a baker's dozen. Hillary, Mark, and Tam share the bagels equally. Will each friend get more than or fewer than 4 whole bagels? **Explain**.

F

K

В

1

Έ

A

2 3 4 5 6 7 8

G

10

9

8

6

C

Locate Points on a Grid

Use the grid for 1-12.

Write the ordered pair for each point.

1. A

2. B

3. C

(5, 6)

4. D

5. E

6. F

Write the point for each ordered pair.

7. (9, 9)

8. (0, 4)

9. (6, 10)

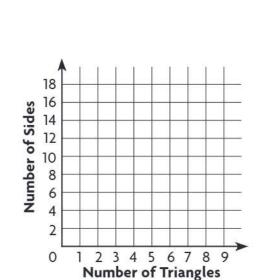
10. (7, 5) **11.** (3, 8) **12.** (10, 6)

Problem Solving | REAL WORLD

There are 3 sides in a triangle. Complete the table. Write ordered pairs from the table. Then graph the ordered pairs on the grid.

13.

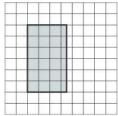
Number of Triangles	1	2		4
Number of Sides	3		9	



Area and Tiling

Find the area of the shaded shape. Write the area in square units.

1.



1 square = 4 square inches

Area of the half squares:

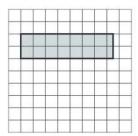
6 half squares × 2 square inches = 12 square inches

Area of the whole squares:

<u>18</u> whole squares \times <u>4</u> square inches = <u>72</u> square inches

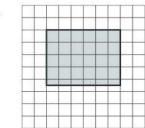
Total area: 12 + 72 = 84 square inches

2.



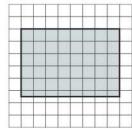
1 square = 4 square meters

3.



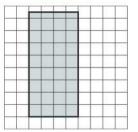
1 square = 4 square miles

4.



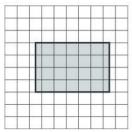
1 square = 16 square feet

5.



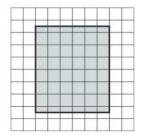
1 square = 25 square yards

6.



1 square = 9 square inches

7.



1 square = 16 square miles

Problem Solving REAL WORLD

8. A deck is in the shape of a rectangle. What is the area of the deck if each square shown in the diagram is 9 square feet? Explain how you found the area.



1 square = 9 square feet

Multiply Three Factors

Find each product.

2.
$$(28 \times 8) \times 3 =$$

2.
$$(28 \times 8) \times 3 =$$
 _____ **3.** $(13 \times 9) \times 4 =$ ____ **4.** $(6 \times 26) \times 3 =$ _____

4.
$$(6 \times 26) \times 3 =$$

5.
$$6 \times (15 \times 7) =$$
 6. $2 \times (8 \times 18) =$ **7.** $(4 \times 21) \times 4 =$ **9.**

6.
$$2 \times (8 \times 18) =$$

7.
$$(4 \times 21) \times 4 =$$

8.
$$8 \times (4 \times 33) =$$

9.
$$3 \times (44 \times 6) =$$

8.
$$8 \times (4 \times 33) =$$
 ______ **9.** $3 \times (44 \times 6) =$ _____ **10.** $(36 \times 9) \times 5 =$ _____

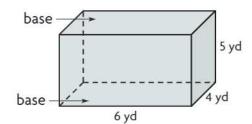
- 11. There are 9 rows of 28 chairs set up for a play. A ticket to the play costs \$4. How much money will be made on ticket sales if all the seats are sold for the play?
- 12. Three families are sharing the cost of renting a canoe for 7 days. The cost for each family is \$14 per day. What is the total cost of renting the canoe for 7 days from the rental shop?

Find Area of the Base

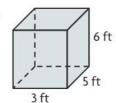
Find the area of the base of the rectangular prism.

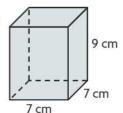
1.
$$A = I \times W$$

$$\textit{A} = \underline{6} \times \underline{4}$$



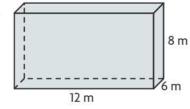
2.

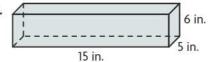




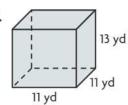


5.





7.



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8. Mr. Patell is packing square tiles in the box shown without gaps or overlaps. Each tile lies flat and measures 1 inch on a side. Mr. Patell says he can fit 64 tiles in the bottom layer. Is he correct? Explain.

