

Name \_\_\_\_\_

## Place Value and Patterns

COMMON CORE STANDARD CC.5.NBT.1

Understand the place value system.

Complete the sentence.

1. 40,000 is 10 times as much as 4,000 | 2. 90 is  $\frac{1}{10}$  of 900.

3. 800 is 10 times as much as 80 | 4. 5,000 is  $\frac{1}{10}$  of 50,000.

Use place-value patterns to complete the table.

Number	10 times as much as	$\frac{1}{10}$ of
5. 100	<b>1,000</b>	<b>10</b>
6. 7,000	<b>70,000</b>	<b>700</b>
7. 300	<b>3,000</b>	<b>30</b>
8. 80	<b>800</b>	<b>8</b>

Number	10 times as much as	$\frac{1}{10}$ of
9. 2,000	<b>20,000</b>	<b>200</b>
10. 900	<b>9,000</b>	<b>90</b>
11. 60,000	<b>600,000</b>	<b>6,000</b>
12. 500	<b>5,000</b>	<b>50</b>

### Problem Solving



13. The Eatery Restaurant has 200 tables. On a recent evening, there were reservations for  $\frac{1}{10}$  of the tables. How many tables were reserved?

**20 tables**

14. Mr. Wilson has \$3,000 in his bank account. Ms. Nelson has 10 times as much money in her bank account as Mr. Wilson has in his bank account. How much money does Ms. Nelson have in her bank account?

**\$30,000**

### Lesson Check (CC.5.NBT.1)

- What is 10 times as much as 700?
  - (A) 7
  - (B) 70
  - (C) 7,000
  - (D) 70,000
- What is  $\frac{1}{10}$  of 3,000?
  - (A) 30,000
  - (B) 300
  - (C) 30
  - (D) 3

### Spiral Review (Reviews CC.4.OA.3, CC.4.NBT.2, CC.4.NBT.5, CC.4.MD.3)

- Risa is sewing a ribbon around the sides of a square blanket. Each side of the blanket is 72 inches long. How many inches of ribbon will Risa need? (Grade 4)
  - (A) 144 inches
  - (B) 208 inches
  - (C) 288 inches
  - (D) 5,184 inches
- What is the value of  $n$ ? (Grade 4)
 
$$9 \times 27 + 2 \times 31 - 28 = n$$
  - (A) 249
  - (B) 277
  - (C) 783
  - (D) 7,567
- Between what pair of numbers is the product of 289 and 7? (Grade 4)
  - (A) between 200 and 300
  - (B) between 1,400 and 1,500
  - (C) between 1,400 and 1,800
  - (D) between 1,400 and 2,100
- Which list shows the numbers in order from **greatest to least**? (Grade 4)
  - (A) 7,613; 7,361; 7,136
  - (B) 7,631; 7,136; 7,613
  - (C) 7,136; 7,361; 7,613
  - (D) 7,136; 7,613; 7,361

Name \_\_\_\_\_

**Place Value of Whole Numbers**

COMMON CORE STANDARD CC.5.NBT.1

Understand the place value system.

Write the value of the underlined digit.

1. 5,165,874

60,000

2. 281,480,100

80,000,000

3. 7,270

200

4. 89,170,326

9,000,000

5. 7,050,423

7,000,000

6. 646,950

40,000

7. 37,123,745

100,000

8. 315,421,732

300,000,000

Write the number in two other forms.

9. 15,409

 $(1 \times 10,000) + (5 \times 1,000) +$   
 $(4 \times 100) + (9 \times 1)$ ; fifteen  
thousand, four hundred nine


10. 100,203

 $(1 \times 100,000) + (2 \times 100) +$   
 $(3 \times 1)$ ; one hundred thousand,  
two hundred three

11. 6,007,200

 $(6 \times 1,000,000) + (7 \times 1,000) +$   
 $(2 \times 100)$ ; six million, seven  
thousand, two hundred

12. 32,005,008

 $(3 \times 10,000,000) + (2 \times 1,000,000) +$   
 $(5 \times 1,000) + (8 \times 1)$ ; thirty-two  
million, five thousand, eight**Problem Solving** REAL WORLD

13. The U.S. Census Bureau has a population clock on the Internet. On a recent day, the United States population was listed as 310,763,136. Write this number in word form.

three hundred ten million,  
seven hundred sixty-three  
thousand, one hundred thirty-six

14. In 2008, the population of 10- to 14-year-olds in the United States was 20,484,163. Write this number in expanded form.

 $(2 \times 10,000,000) + (4 \times$   
 $100,000) + (8 \times 10,000) +$   
 $(4 \times 1,000) + (1 \times 100) +$   
 $(6 \times 10) + (3 \times 1)$

**Lesson Check** (CC.5.NBT.1)

- A movie cost \$3,254,107 to produce. Which digit is in the hundred thousands place?
  - (A) 5
  - (B) 4
  - (C) 2
  - (D) 1
- Which is another way to write two hundred ten million, sixty-four thousand, fifty?
  - (A) 210,640,050
  - (B) 210,064,050
  - (C) 201,064,500
  - (D) 200,106,450

**Spiral Review** (Reviews CC.4.OA.5, CC.4.NBT.6, CC.4.G.2, CC.4.G.3)

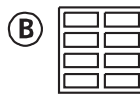
- If the pattern below continues, what number likely comes next? (Grade 4)  
9, 12, 15, 18, 21,   ?
  - (A) 36
  - (B) 24
  - (C) 22
  - (D) 20
- What is  $52 \div 8$ ? (Grade 4)
  - (A) 8 r4
  - (B) 7 r4
  - (C) 6 r4
  - (D) 5 r4

- How many pairs of parallel sides does the trapezoid below have? (Grade 4)



- (A) 0
- (B) 1
- (C) 2
- (D) 4

- Which figure appears to have only 1 line of symmetry? (Grade 4)



# ALGEBRA

## Lesson 1.3

Name \_\_\_\_\_

### Properties

COMMON CORE STANDARD CC.5.NBT.6

Perform operations with multi-digit whole numbers and with decimals to hundredths.

Use properties to find the sum or product.

1.  $6 \times 89$

$$\begin{aligned} &6 \times (90 - 1) \\ &(6 \times 90) - (6 \times 1) \\ &540 - 6 \\ &534 \end{aligned}$$

2.  $93 + (68 + 7)$

168

3.  $5 \times 23 \times 2$

230

4.  $8 \times 51$

408

5.  $34 + 0 + 18 + 26$

78

6.  $6 \times 107$

642

Complete the equation, and tell which property you used.

7.  $(3 \times 10) \times 8 = \underline{3} \times (10 \times 8)$

Associative Property of Multiplication

8.  $16 + 31 = 31 + \underline{16}$

Commutative Property of Addition

9.  $0 + \underline{91} = 91$

Identity Property of Addition

10.  $21 \times \underline{9} = 9 \times 21$

Commutative Property of Multiplication

### Problem Solving



11. The Metro Theater has 20 rows of seats with 18 seats in each row. Tickets cost \$5. The theater's income in dollars if all seats are sold is  $(20 \times 18) \times 5$ . Use properties to find the total income.

\$1,800

12. The numbers of students in the four sixth-grade classes at Northside School are 26, 19, 34, and 21. Use properties to find the total number of students in the four classes.

100

### Lesson Check (CC.5.NBT.6)

- To find  $19 + (11 + 37)$ , Lennie added 19 and 11. Then he added 37 to the sum. Which property did he use?
  - (A) Distributive Property
  - (B) Commutative Property of Addition
  - (C) Associative Property of Addition
  - (D) Identity Property of Addition
- Marla did 65 sit-ups each day for one week. Which expression can you use to find the total number of sit-ups Marla did during the week?
  - (A)  $(7 \times 6) + (7 \times 5)$
  - (B)  $(5 \times 60) + (5 \times 7)$
  - (C)  $(7 + 60) \times (7 + 5)$
  - (D)  $(7 \times 60) + (7 \times 5)$

### Spiral Review (Reviews CC.4.OA.4, CC.4.NBT.5, CC.4.NBT.6; CC.5.NBT.1)

- The average sunflower has 34 petals. Which is the best estimate of the total number of petals on 57 sunflowers? (Grade 4)
  - (A) 18
  - (B) 180
  - (C) 1,800
  - (D) 18,000
- A golden eagle flies a distance of 290 miles in 5 days. If the eagle flies the same distance each day of its journey, how far does the eagle fly per day? (Grade 4)
  - (A) 50 miles
  - (B) 58 miles
  - (C) 290 miles
  - (D) 295 miles
- What is the value of the underlined digit in the following number? (Lesson 1.2)  
 2,983,785
  - (A) 80
  - (B) 800
  - (C) 8,000
  - (D) 80,000
- The number 5 is (Grade 4)
  - (A) prime.
  - (B) composite.
  - (C) neither prime nor composite.
  - (D) both prime and composite.

# ALGEBRA

## Lesson 1.4

Name \_\_\_\_\_

### Powers of 10 and Exponents

COMMON CORE STANDARD CC.5.NBT.2

Understand the place value system.

Write in exponent form and word form.

1.  $10 \times 10 \times 10$

exponent form:  $10^3$

word form: the  
third power  
of ten

2.  $10 \times 10$

exponent form:  $10^2$

word form: the  
second  
power of ten

3.  $10 \times 10 \times 10 \times 10$

exponent form:  $10^4$

word form: the  
fourth power  
of ten

Find the value.

4.  $10^3$

1,000

5.  $4 \times 10^2$

400

6.  $9 \times 10^4$

90,000

7.  $10^1$

10

8.  $10^5$

100,000

9.  $5 \times 10^1$

50

10.  $7 \times 10^3$

7,000

11.  $8 \times 10^0$

8

### Problem Solving

REAL WORLD

12. The moon is about 240,000 miles from Earth. What is this distance written as a whole number multiplied by a power of ten?

$24 \times 10^4$  miles

13. The sun is about  $93 \times 10^6$  miles from Earth. What is this distance written as a whole number?

93,000,000 miles

### Lesson Check (CC.5.NBT.2)

- Which of the following is NOT equivalent to "3 times the sixth power of 10?"  
 (A)  $3 \times 10^6$   
 (B) 3,000,000  
 (C)  $3 \times 10 \times 6$   
 (D)  $3 \times 1,000,000$
- Gary mails  $10^3$  flyers to clients in one week. How many flyers does Gary mail?  
 (A) 10  
 (B) 100  
 (C) 1,000  
 (D) 10,000

### Spiral Review (Reviews CC.4.NBT.5, CC.4.NBT.6)

- Harley is loading 625 bags of cement onto small pallets. Each pallet holds 5 bags. How many pallets will Harley need? (Grade 4)  
 (A) 125  
 (B) 620  
 (C) 630  
 (D) 3,125
- Marylou buys a package of 500 jewels to decorate 4 different pairs of jeans. She uses the same number of jewels on each pair of jeans. How many jewels will she use for each pair of jeans? (Grade 4)  
 (A) 100  
 (B) 125  
 (C) 200  
 (D) 2,000
- Manny buys 4 boxes of straws for his restaurant. There are 500 straws in each box. How many straws does he buy? (Grade 4)  
 (A) 20,000  
 (B) 2,000  
 (C) 200  
 (D) 125
- Cammie goes to the gym to exercise 4 times per week. Altogether, how many times does she go to the gym in 10 weeks? (Grade 4)  
 (A) 4  
 (B) 10  
 (C) 20  
 (D) 40



# ALGEBRA

## Lesson 1.5

Name \_\_\_\_\_

### Multiplication Patterns

COMMON CORE STANDARD CC.5.NBT.2

Understand the place value system.

Use mental math to complete the pattern.

- |   |   |   |
|---|---|---|
| 1. $8 \times 3 = 24$<br>$(8 \times 3) \times 10^1 = \underline{240}$<br>$(8 \times 3) \times 10^2 = \underline{2,400}$<br>$(8 \times 3) \times 10^3 = \underline{24,000}$             | 2. $5 \times 6 = \underline{30}$<br>$(5 \times 6) \times 10^1 = \underline{300}$<br>$(5 \times 6) \times 10^2 = \underline{3,000}$<br>$(5 \times 6) \times 10^3 = \underline{30,000}$     | 3. $3 \times \underline{9} = 27$<br>$(3 \times 9) \times 10^1 = \underline{270}$<br>$(3 \times 9) \times 10^2 = \underline{2,700}$<br>$(3 \times 9) \times 10^3 = \underline{27,000}$     |
| 4. $\underline{7} \times 4 = 28$<br>$(7 \times 4) \times \underline{10^1} = 280$<br>$(7 \times 4) \times \underline{10^2} = 2,800$<br>$(7 \times 4) \times \underline{10^3} = 28,000$ | 5. $6 \times 8 = \underline{48}$<br>$(6 \times 8) \times 10^2 = \underline{4,800}$<br>$(6 \times 8) \times 10^3 = \underline{48,000}$<br>$(6 \times 8) \times 10^4 = \underline{480,000}$ | 6. $\underline{4} \times 4 = 16$<br>$(4 \times 4) \times 10^2 = \underline{1,600}$<br>$(4 \times 4) \times 10^3 = \underline{16,000}$<br>$(4 \times 4) \times 10^4 = \underline{160,000}$ |

Use mental math and a pattern to find the product.

- |   |  |  |
|---|--|--|
| 7. $(2 \times 9) \times 10^2 = \underline{1,800}$   | 8. $(8 \times 7) \times 10^2 = \underline{5,600}$    | 9. $(9 \times 6) \times 10^3 = \underline{54,000}$   |
| 10. $(3 \times 7) \times 10^3 = \underline{21,000}$ | 11. $(5 \times 9) \times 10^4 = \underline{450,000}$ | 12. $(4 \times 8) \times 10^4 = \underline{320,000}$ |
| 13. $(8 \times 8) \times 10^3 = \underline{64,000}$ | 14. $(6 \times 4) \times 10^4 = \underline{240,000}$ | 15. $(5 \times 5) \times 10^3 = \underline{25,000}$  |

### Problem Solving

16. The Florida Everglades welcomes about  $2 \times 10^3$  visitors per day. Based on this, about how many visitors come to the Everglades per week?
17. The average person loses about  $8 \times 10^1$  strands of hair each day. About how many strands of hair would the average person lose in 9 days?

about 14,000 visitors

about 720 strands

### Lesson Check (CC.5.NBT.2)

1. How many zeros are in the product  $(6 \times 5) \times 10^3$ ?  
 (A) 3  
 (B) 4  
 (C) 5  
 (D) 6
2. Addison studies a tarantula that is 30 millimeters long. Suppose she uses a microscope to magnify the spider by  $4 \times 10^2$ . How long will the spider appear to be?  
 (A) 12 millimeters  
 (B) 120 millimeters  
 (C) 1,200 millimeters  
 (D) 12,000 millimeters

### Spiral Review (Reviews CC.4.OA.3, CC.4.NBT.5)

3. Hayden has 6 rolls of dimes. There are 50 dimes in each roll. How many dimes does he have altogether? (Grade 4)  
 (A) 300  
 (B) 110  
 (C) 56  
 (D) 30
4. An adult ticket to the zoo costs \$20, and a child's ticket costs \$10. How much will it cost for Mr. and Mrs. Brown and their 4 children to get into the zoo? (Grade 4)  
 (A) \$40  
 (B) \$60  
 (C) \$80  
 (D) \$100
5. At a museum, 100 posters are displayed in each of 4 rooms. Altogether, how many posters are displayed? (Grade 4)  
 (A) 40  
 (B) 100  
 (C) 104  
 (D) 400
6. A store sells a gallon of milk for \$3. A baker buys 30 gallons of milk for his bakery. How much will he have to pay? (Grade 4)  
 (A) \$120  
 (B) \$90  
 (C) \$60  
 (D) \$30



### Lesson Check (CC.5.NBT.5)

- Mr. Nielson works 154 hours each month. He works 8 months each year. How many hours does Mr. Nielson work each year?
  - (A) 832 hours
  - (B) 1,232 hours
  - (C) 1,502 hours
  - (D) 1,600 hours
- Sasha lives 1,493 miles from her grandmother. One year, Sasha's family made 4 round trips to visit her grandmother. How many miles did they travel in all?
  - (A) 5,972 miles
  - (B) 8,944 miles
  - (C) 11,944 miles
  - (D) 15,944 miles

### Spiral Review (Reviews CC.4.NBT.2, CC.4.NBT.3, CC.4.NF.6; CC.5.NBT.1)

- Yuna missed 5 points out of 100 points on her math test. What decimal number represents the part of her math test that she answered correctly? (Grade 4)
  - (A) 0.05
  - (B) 0.50
  - (C) 0.75
  - (D) 0.95
- The number below represents the number of fans that attended Chicago Cubs baseball games in 2008. What is this number written in standard form? (Lesson 1.2)
 
$$(3 \times 1,000,000) + (3 \times 100,000) + (2 \times 100)$$
  - (A) 33,300,200
  - (B) 30,300,200
  - (C) 3,300,200
  - (D) 330,200
- Which symbol makes the statement true? (Grade 4)
 
$$602,163 \bigcirc 620,163$$
  - (A) >
  - (B) <
  - (C) =
  - (D) ÷
- A fair was attended by 755,082 people altogether. What is this number rounded to the nearest ten thousand? (Grade 4)
  - (A) 800,000
  - (B) 760,000
  - (C) 750,000
  - (D) 700,000

Name \_\_\_\_\_

**Multiply by 2-Digit Numbers****COMMON CORE STANDARD** CC.5.NBT.5

Perform operations with multi-digit whole numbers and with decimals to hundredths.

Estimate. Then find the product.

1. Estimate: 4,000

$$\begin{array}{r} 82 \\ \times 49 \\ \hline 738 \\ + 3280 \\ \hline 4,018 \end{array}$$

2. Estimate: 6,300

$$\begin{array}{r} 92 \\ \times 68 \\ \hline 6,256 \end{array}$$

3. Estimate: 16,000

$$\begin{array}{r} 396 \\ \times 37 \\ \hline 14,652 \end{array}$$

4.  $23 \times 67$

1,400; 1,541

5.  $86 \times 33$

2,700; 2,838

6.  $78 \times 71$

5,600; 5,538

7.  $309 \times 29$

9,000; 8,961

8.  $612 \times 87$

54,000; 53,244

9.  $476 \times 72$

35,000; 34,272

**Problem Solving****REAL WORLD**

10. A company shipped 48 boxes of canned dog food. Each box contains 24 cans. How many cans of dog food did the company ship in all?

1,152 cans

11. There were 135 cars in a rally. Each driver paid a \$25 fee to participate in the rally. How much money did the drivers pay in all?

\$3,375

### Lesson Check (CC.5.NBT.5)

- A chessboard has 64 squares. At a chess tournament 84 chessboards were used. How many squares are there on 84 chessboards?
  - (A) 4,816
  - (B) 5,036
  - (C) 5,166
  - (D) 5,376
- Last month, a manufacturing company shipped 452 boxes of ball bearings. Each box contains 48 ball bearings. How many ball bearings did the company ship last month?
  - (A) 21,296
  - (B) 21,686
  - (C) 21,696
  - (D) 21,706

### Spiral Review (CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.5, CC.5.NBT.6)

- What is the standard form of the number three million, sixty thousand, five hundred twenty? (Lesson 1.2)
  - (A) 3,060,520
  - (B) 3,065,020
  - (C) 3,600,520
  - (D) 3,652,000
- The population of Clarksville is about 6,000 people. What is Clarksville's population written as a whole number multiplied by a power of ten? (Lesson 1.4)
  - (A)  $6 \times 10^1$
  - (B)  $6 \times 10^2$
  - (C)  $6 \times 10^3$
  - (D)  $6 \times 10^4$
- What number completes the following equation? (Lesson 1.3)
 
$$8 \times (40 + 7) = (8 \times \square) + (8 \times 7)$$
  - (A) 40
  - (B) 47
  - (C) 320
  - (D) 376
- A sporting goods store ordered 144 cans of tennis balls. Each can contains 3 balls. How many tennis balls did the store order? (Lesson 1.6)
  - (A) 342
  - (B) 412
  - (C) 422
  - (D) 432

Name \_\_\_\_\_

**Relate Multiplication to Division****COMMON CORE STANDARD** CC.5.NBT.6

Perform operations with multi-digit whole numbers and with decimals to hundredths.

**Addends may vary.**

Use multiplication and the Distributive Property to find the quotient.

1.  $70 \div 5 = \underline{\quad 14 \quad}$

2.  $96 \div 6 = \underline{\quad 16 \quad}$

3.  $85 \div 5 = \underline{\quad 17 \quad}$

$(5 \times 10) + (5 \times 4) = 70$

$(6 \times 10) + (6 \times 6) = 96$

$(5 \times 10) + (5 \times 7) = 85$

$\underline{5 \times 14 = 70}$

$\underline{6 \times 16 = 96}$

$\underline{5 \times 17 = 85}$

4.  $84 \div 6 = \underline{\quad 14 \quad}$

5.  $168 \div 7 = \underline{\quad 24 \quad}$

6.  $104 \div 4 = \underline{\quad 26 \quad}$

$(6 \times 10) + (6 \times 4) = 84$

$(7 \times 20) + (7 \times 4) = 168$

$(4 \times 20) + (4 \times 6) = 104$

$\underline{6 \times 14 = 84}$

$\underline{7 \times 24 = 168}$

$\underline{4 \times 26 = 104}$

7.  $171 \div 9 = \underline{\quad 19 \quad}$

8.  $102 \div 6 = \underline{\quad 17 \quad}$

9.  $210 \div 5 = \underline{\quad 42 \quad}$

$(9 \times 10) + (9 \times 9) = 171$

$(6 \times 10) + (6 \times 7) = 102$

$(5 \times 40) + (5 \times 2) = 210$

$\underline{9 \times 19 = 171}$

$\underline{6 \times 17 = 102}$

$\underline{5 \times 42 = 210}$

**Problem Solving** 

10. Ken is making gift bags for a party. He has 64 colored pens and wants to put the same number in each bag. How many bags will Ken make if he puts 4 pens in each bag?

**16 bags**

11. Maritza is buying wheels for her skateboard shop. She ordered a total of 92 wheels. If wheels come in packages of 4, how many packages will she receive?

**23 packages**

### Lesson Check (CC.5.NBT.6)

- Which of the following expressions can be used to find  $36 \div 3$ ?
  - (A)  $(3 \times 10) + (3 \times 2)$
  - (B)  $(6 \times 10) + (6 \times 2)$
  - (C)  $(3 \times 12) + (3 \times 2)$
  - (D)  $(2 \times 10) + (3 \times 12)$
- Which of the following expressions can be used to find  $126 \div 7$ ?
  - (A)  $(7 \times 20) + (7 \times 6)$
  - (B)  $(7 \times 10) + (7 \times 8)$
  - (C)  $(6 \times 20) + (6 \times 1)$
  - (D)  $(2 \times 50) + (2 \times 13)$

### Spiral Review (CC.4.OA.3, CC.5.NBT.1, CC.5.NBT.2)

- Allison separates her 23 stickers into 4 equal piles. How many stickers does she have left over? (Grade 4)
  - (A) 27
  - (B) 19
  - (C) 5
  - (D) 3
- The area of Arizona is 114,006 square miles. What is the expanded form of this number? (Lesson 1.2)
  - (A)  $(1 \times 100,000) + (1 \times 1,400) + (6 \times 1)$
  - (B)  $(1 \times 100,000) + (1 \times 11,000) + (1 \times 4,000) + (6 \times 1)$
  - (C)  $(1 \times 100,000) + (1 \times 10,000) + (4 \times 1,000) + (6 \times 1)$
  - (D)  $(1 \times 11,000) + (1 \times 4,000) + (6 \times 1)$
- A website had 2,135,789 hits. What is the value of the digit 3? (Lesson 1.2)
  - (A) 30
  - (B) 3,000
  - (C) 30,000
  - (D) 300,000
- Which of the following shows the value of the fourth power of ten? (Lesson 1.4)
  - (A) 1,000
  - (B) 10,000
  - (C) 100,000
  - (D) 1,000,000



Name \_\_\_\_\_

**Problem Solving • Multiplication and Division**

**COMMON CORE STANDARD** CC.5.NBT.6

Perform operations with multi-digit whole numbers and with decimals to hundredths.

Solve the problems below. Show your work.

1. Dani is making punch for a family picnic. She adds 16 fluid ounces of orange juice, 16 fluid ounces of lemon juice, and 8 fluid ounces of lime juice to 64 fluid ounces of water. How many 8-ounce glasses of punch can she fill?

$$16 + 16 + 8 + 64 = 104 \text{ fluid ounces}$$

$$\begin{aligned} 104 \div 8 &= (40 + 64) \div 8 \\ &= (40 \div 8) + (64 \div 8) \\ &= 5 + 8, \text{ or } 13 \end{aligned}$$

**13 glasses**

2. Ryan has nine 14-ounce bags of popcorn to repackage and sell at the school fair. A small bag holds 3 ounces. How many small bags can he make?

**42 small bags**

3. Bianca is making scarves to sell. She has 33 pieces of blue fabric, 37 pieces of green fabric, and 41 pieces of red fabric. Suppose Bianca uses 3 pieces of fabric to make 1 scarf. How many scarves can she make?

**37 scarves**

4. Jasmine has 8 packs of candle wax to make scented candles. Each pack contains 14 ounces of wax. Jasmine uses 7 ounces of wax to make one candle. How many candles can she make?

**16 candles**

5. Maurice puts 130 trading cards in protector sheets. He fills 7 sheets and puts the remaining 4 cards in an eighth sheet. Each of the filled sheets has the same number of cards. How many cards are in each filled sheet?

**18 cards**

### Lesson Check (CC.5.NBT.6)

- Joyce is helping her aunt create craft kits. Her aunt has 138 pipe cleaners, and each kit will include 6 pipe cleaners. How many kits can they make?  
 (A) 13  
 (B) 18  
 (C) 22  
 (D) 23
- Stefan plants seeds for 30 carrot plants and 45 beet plants in 5 rows, with the same number of seeds in each row. How many seeds are planted in each row?  
 (A) 10  
 (B) 14  
 (C) 15  
 (D) 80

### Spiral Review (Reviews CC.4.NBT.3; CC.5.NBT.5, CC.5.NBT.6)

- Georgia wants to evenly divide 84 trading cards between 6 friends. How many cards will each friend get? (Lesson 1.8)  
 (A) 12  
 (B) 13  
 (C) 14  
 (D) 16
- Maria has 144 marbles. Emanuel has 4 times the number of marbles Maria has. How many marbles does Emanuel have? (Lesson 1.6)  
 (A) 36  
 (B) 140  
 (C) 566  
 (D) 576
- The Conservation Society bought and planted 45 cherry trees. Each tree cost \$367. What was the total cost of planting the trees? (Lesson 1.7)  
 (A) \$3,303  
 (B) \$16,485  
 (C) \$16,515  
 (D) \$20,185
- A sports arena covers 710,430 square feet of ground. A newspaper reported that the arena covers about 700,000 square feet of ground. To what place value was the number rounded? (Grade 4)  
 (A) hundreds  
 (B) thousands  
 (C) ten thousands  
 (D) hundred thousands

# ALGEBRA

## Lesson 1.10

Name \_\_\_\_\_

### Numerical Expressions

COMMON CORE STANDARD CC.5.OA.2

Write and interpret numerical expressions.

Write an expression to match the words.

1. Ethan collected 16 seashells. He lost 4 of them while walking home.

$$16 - 4$$

2. Yasmine bought 4 bracelets. Each bracelet cost \$3.

$$4 \times \$3$$

3. Amani did 10 jumping jacks. Then she did 7 more.

$$10 + 7$$

4. Darryl has a board that is 8 feet long. He cuts it into pieces that are each 2 feet long.

$$8 \div 2$$

Write words to match the expression. **Check students' work.**

5.  $3 + (4 \times 12)$

6.  $36 \div 4$

7.  $24 - (6 + 3)$

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Draw a line to match the expression with the words.

8. Ray picked 30 apples and put them equally into 3 baskets. Then he ate two of the apples in a basket.

$$(3 \times 2) \times 30$$

9. Quinn had \$30. She bought a notebook for \$3 and a pack of pens for \$2.

$$(30 \div 3) - 2$$

10. Colleen runs 3 miles twice a day for 30 days.

$$30 - (3 + 2)$$

### Problem Solving



11. Kylie has 14 polished stones. Her friend gives her 6 more stones. Write an expression to match the words.

$$14 + 6$$

12. Rashad had 25 stamps. He shared them equally among himself and 4 friends. Then Rashad found 2 more stamps in his pocket. Write an expression to match the words.

$$(25 \div 5) + 2$$

### Lesson Check (CC 5.OA.1)

- Jenna bought 3 packs of bottled water, with 8 bottles in each pack. Then she gave 6 bottles away. Which expression matches the words?
  - (A)  $(3 + 8) + 6$
  - (B)  $(3 \times 8) \times 6$
  - (C)  $(3 \times 8) + 6$
  - $(3 \times 8) - 6$
- Stephen had 24 miniature cars. He gave 4 cars to his brother. Then he passed the rest of the cars out equally among 4 of his friends. Which operation would you use to represent the first part of this situation?
  - (A) addition
  - subtraction
  - (C) division
  - (D) multiplication

### Spiral Review (CC 5.NBT.2, CC 5.NBT.5, CC 5.NBT.6)

- To find  $36 + 29 + 14$ , Joshua rewrote the expression as  $36 + 14 + 29$ . What property did Joshua use to rewrite the expression? (Lesson 1.3)
  - (A) Commutative Property of Multiplication
  - Commutative Property of Addition
  - (C) Associative Property of Addition
  - (D) Associative Property of Multiplication
- There are 6 baskets on the table. Each basket has 144 crayons in it. How many crayons are there in all? (Lesson 1.6)
  - (A) 644
  - (B) 664
  - (C) 844
  - 864
- Mr. Anderson wrote  $(7 \times 9) \times 10^3$  on the board. What is the value of that expression? (Lesson 1.5)
  - (A) 630
  - (B) 6,300
  - 63,000
  - (D) 630,000
- Barbara mixes 54 ounces of granola and 36 ounces of raisins. She divides the mixture into 6-ounce servings. How many servings does she make? (Lesson 1.9)
  - (A) 3
  - (B) 12
  - 15
  - (D) 96

# ALGEBRA

## Lesson 1.11

Name \_\_\_\_\_

### Evaluate Numerical Expressions

COMMON CORE STANDARD CC.5.OA.1

Write and interpret numerical expressions.

Evaluate the numerical expression.

1.  $24 \times 5 - 41$   
 $120 - 41$

79

2.  $(32 - 20) \div 4$

3

3.  $16 \div (2 + 6)$

2

4.  $15 \times (8 - 3)$

75

5.  $4 \times 8 - 7$

25

6.  $27 + 5 \times 6$

57

7.  $3 \div 3 \times 4 + 6$

10

8.  $14 + 4 \times 4 - 9$

21

Rewrite the expression with parentheses to equal the given value.

9.  $3 \times 4 - 1 + 2$

value: 11

10.  $2 \times 6 \div 2 + 1$

value: 4

11.  $5 + 3 \times 2 - 6$

value: 10

$3 \times (4 - 1) + 2$   $(2 \times 6) \div (2 + 1)$   $(5 + 3) \times 2 - 6$

### Problem Solving

REAL WORLD

12. Sandy has several pitchers to hold lemonade for the school bake sale. Two pitchers can hold 64 ounces each, and four pitchers can hold 48 ounces each. How many total ounces can Sandy's pitchers hold?

320 ounces

13. At the bake sale, Jonah sold 4 cakes for \$8 each and 36 muffins for \$2 each. What was the total amount, in dollars, that Jonah received from these sales?

\$104

### Lesson Check (CC.5.OA.1)

1. What is the value of the expression  $4 \times (4 - 2) + 6$ ?  
 (A) 6  
 (B) 14  
 (C) 24  
 (D) 40
2. Lannie ordered 12 copies of the same book for his book club members. The books cost \$19 each, and the order has a \$15 shipping charge. What is the total cost of Lannie's order?  
 (A) \$243  
 (B) \$213  
 (C) \$199  
 (D) \$161

### Spiral Review (CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.5, CC.5.NBT.6)

3. A small company packs 12 jars of jelly into each of 110 boxes to bring to the farmers' market. How many jars of jelly does the company pack in all? (Lesson 1.7)  
 (A) 1,220  
 (B) 1,320  
 (C) 1,350  
 (D) 2,300
4. June has 42 sports books, 85 mystery books, and 69 nature books. She arranges her books equally on 7 shelves. How many books are on each shelf? (Lesson 1.9)  
 (A) 12  
 (B) 18  
 (C) 28  
 (D) 196
5. Last year, a widget factory produced one million, twelve thousand, sixty widgets. What is this number written in standard form? (Lesson 1.2)  
 (A) 1,012,060  
 (B) 1,012,600  
 (C) 1,120,060  
 (D) 112,000,060
6. A company has 3 divisions. Last year, each division earned a profit of  $\$5 \times 10^5$ . What was the total profit the company earned last year? (Lesson 1.4)  
 (A) \$50,000  
 (B) \$150,000  
 (C) \$500,000  
 (D) \$1,500,000

# ALGEBRA

## Lesson 1.12

Name \_\_\_\_\_

### Grouping Symbols

COMMON CORE STANDARD CC.5.OA.1

Write and interpret numerical expressions.

Evaluate the numerical expression.

1.  $5 \times [(11 - 3) - (13 - 9)]$

$$5 \times [8 - (13 - 9)]$$

$$5 \times [8 - 4]$$

$$5 \times 4$$

**20**

2.  $30 - [(9 \times 2) - (3 \times 4)]$

**24**

3.  $36 \div [(14 - 5) - (10 - 7)]$

**6**

4.  $7 \times [(9 + 8) - (12 - 7)]$

**84**

5.  $[(25 - 11) + (15 - 9)] \div 5$

**4**

6.  $[(8 \times 9) - (6 \times 7)] - 15$

**15**

7.  $8 \times \{[(7 + 4) \times 2] - [(11 - 7) \times 4]\}$

**48**

8.  $\{[(8 - 3) \times 2] + [(5 \times 6) - 5]\} \div 5$

**7**

### Problem Solving

Use the information at the right for 9 and 10.

9. Write an expression to represent the total number of muffins and cupcakes Joan sells in 5 days.

Joan has a cafe. Each day, she bakes 24 muffins. She gives away 3 and sells the rest. Each day, she also bakes 36 cupcakes. She gives away 4 and sells the rest.

$$5 \times [(24 - 3) + (36 - 4)]$$

10. Evaluate the expression to find the total number of muffins and cupcakes Joan sells in 5 days.

**265 muffins and cupcakes**

### Lesson Check (CC.5.OA.1)

1. What is the value of the expression?

$$9 \times [(21 - 4) - (2 + 7)]$$

- 72  
 108  
 190  
 198

2. Which expression has a value of 24?

- $[(17 - 9) \times (3 + 2)] \div 2$   
  $[(17 + 9) - (3 + 2)] - 2$   
  $[(17 - 9) \times (3 \times 2)] \div 2$   
  $[(17 - 9) + (3 \times 2)] \times 2$

### Spiral Review (CC.5.OA.2, CC.5.NBT.1, CC.5.NBT.5)

3. What is  $\frac{1}{10}$  of 200? (Lesson 1.1)

- 2  
 20  
 2,000  
 20,000

4. The Park family is staying at a hotel near an amusement park for 3 nights. The hotel costs \$129 per night. How much will their 3-night stay in the hotel cost? (Lesson 1.6)

- \$67  
 \$369  
 \$378  
 \$387

5. Vidal bought 2 pizzas and cut each into 8 slices. He and his friends ate 10 slices. Which expression matches the words?

(Lesson 1.10)

- $(2 + 8) - 10$   
  $(2 \times 8) - 10$   
  $(2 \times 8) + 10$   
  $(2 \times 10) - 8$

6. What is the value of the underlined digit in 783,549,201? (Lesson 1.2)

- 4  
 40  
 40,000  
 400,000



Name \_\_\_\_\_

## Chapter 1 Extra Practice

### Lessons 1.1 - 1.2

Complete the sentence.

1. 300 is 10 times as much as 30.

2. 400 is  $\frac{1}{10}$  of 4,000.

Write the value of the underlined digit.

3. 45,130

4. 8,123,476

5. 153,471

6. 6,583,450

5,000

100,000

400

80,000

### Lesson 1.3

Complete the equation, and tell which property you used.

1.  $(18 \times 2) \times 5 = 18 \times (2 \times \underline{5})$

2.  $64 + 58 = \underline{58} + 64$

Associative Property  
of Multiplication

Commutative Property  
of Addition

### Lessons 1.4 - 1.5

Find the value.

1.  $10^2$

2.  $10^5$

3.  $6 \times 10^3$

4.  $8 \times 10^7$

100

100,000

6,000

80,000,000

5.  $(6 \times 7) \times 10^3$

6.  $(5 \times 4) \times 10^2$

7.  $(3 \times 9) \times 10^6$

8.  $(5 \times 8) \times 10^0$

42,000

2,000

27,000,000

40

### Lessons 1.6 - 1.7

Estimate. Then find the product.

**Possible estimates are given.**

1. Estimate 2,000

2. Estimate 16,000

3. Estimate 1,600

4. Estimate 24,000

$$\begin{array}{r} 429 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1,785 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 81 \\ \times 22 \\ \hline \end{array}$$

$$\begin{array}{r} 558 \\ \times 44 \\ \hline \end{array}$$

2,145

14,280

1,782

24,552

5.  $9 \times 802$

6.  $3,699 \times 7$

7.  $34 \times 93$

8.  $678 \times 87$

7,200; 7,218

28,000;  
25,893

2,700; 3,162

63,000;  
58,986

