Name _____ Date _____ Class _____

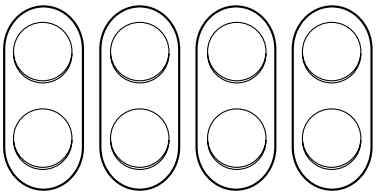
LESSON 11-6

Practice A

Multiplying Integers

Write the multiplication modeled.

1.



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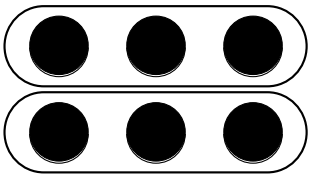
2.



_____

Circle the letter of the correct answer.

3. What does 3 • (−2) mean?

A 3 groups of 2

B 3 groups of −2

C the opposite of 3 groups of 2

D the opposite of 3 groups of −2

4. What does −4 • (5) mean?

F 4 groups of 5

G 4 groups of −5

H the opposite of 4 groups of 5

J the opposite of 4 groups of −5

5. Which product is negative?

A 8 • 9

B −7 • (−6)

C −3 • (−4)

D 2 • (−10)

6. Which product is positive?

F 2 • (−8)

G −6 • 7

H −6 • (−9)

J 12 • (−5)

Match each multiplication expression to its product below.

A. −12 **B. 8** **C. −9** **D. 12** **E. 9** **F. −8**

7. −4 • (−2) _____ **8.** 3 • (−3) _____ **9.** −6 • 2 _____

10. −1 • (−9) _____ **11.** −4 • (−3) _____ **12.** 2 • (−4) _____

13. The temperature is dropping 2°F every day. Write a multiplication expression to model how much the temperature will drop in 5 days.

_____

14. The value of Tom's stock went down about $3 every hour today. Write a multiplication expression to model how much the value of Tom's stock decreased in 8 hours.

_____

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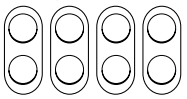
LESSON 11-6

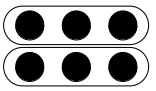
Practice A

Multiplying Integers

Write the multiplication modeled.

1. 

4 • 2

2. 

2 • (−3)

Circle the letter of the correct answer.

3. What does 3 • (−2) mean?
   - **A** 3 groups of 2
   - **B** 3 groups of −2
   - **C** the opposite of 3 groups of 2
   - **D** the opposite of 3 groups of −2

4. What does −4 • (5) mean?
   - **F** 4 groups of 5
   - **G** 4 groups of −5
   - **H** the opposite of 4 groups of 5
   - **J** the opposite of 4 groups of −5

5. Which product is negative?
   - **A** 8 • 9
   - **B** −7 • (−6)
   - **C** −3 • (−4)
   - **D** 2 • (−10)

6. Which product is positive?
   - **F** 2 • (−8)
   - **G** −6 • 7
   - **H** −6 • (−9)
   - **J** 12 • (−5)

Match each multiplication expression to its product below.

A. −12 **B.** 8 **C.** −9 **D.** 12 **E.** 9 **F.** −8

7. −4 • (−2) B
8. 3 • (−3) C
9. −6 • 2 A
10. −1 • (−9) E
11. −4 • (−3) D
12. 2 • (−4) F

13. The temperature is dropping 2°F every day. Write a multiplication expression to model how much the temperature will drop in 5 days.

5 • (−2)

14. The value of Tom's stock went down about $3 every hour today. Write a multiplication expression to model how much the value of Tom's stock decreased in 8 hours.

8 • (−3)

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LESSON 11-6

Practice B

Multiplying Integers

Write the sign of each product.

1. 7 • 8 positive
2. 5 • (−9) negative
3. −4 • 12 negative
4. −6 • (−11) positive
5. −3 • 8 negative
6. −12 • (−18) positive

Find each product.

7. 5 • (−7) −35
8. −4 • 3 −12
9. −8 • (−2) 16
10. −9 • (−1) 9
11. 5 • (−6) −30
12. −10 • (−4) 40
13. 6 • (−8) −48
14. 0 • (−3) 0
15. 7 • (−9) −63

Evaluate 4*n* for each value of *n*.

16. *n* = 2 8
17. *n* = −4 −16
18. *n* = −7 −28
19. *n* = −3 −12
20. *n* = 11 44
21. *n* = 0 0

Evaluate −3*n* for each value of *n*.

22. *n* = −5 15
23. *n* = 0 0
24. *n* = 6 −18
25. *n* = −8 24
26. *n* = 7 −21
27. *n* = −1 3

28. Last month, Tyler made five withdrawals of $25 each from his bank account and no deposits. What multiplication expression models Tyler's bank transactions last month?

5 • (−25)

29. The Atlantic Ocean is sinking 4 inches every 100 years. Write a multiplication expression that models how much the Atlantic Ocean will sink in 300 years. How many inches will it sink in that time?

3 • (−4); 12 inches

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LESSON 11-6

Practice C

Multiplying Integers

Use each set of integers to write two expressions, one with a positive product and one with a negative product. Possible answers are given.

1. −3, 2, −4
   −3 • (−4); −3 • 2
2. 8, −4, 5
   8 • 5; 8 • (−4)
3. −1, −9, 7
   −1 • (−9); −1 • 7

Find each product.

4. 9 • (−12) −108
5. −16 • 13 −208
6. −8 • (−25) 200
7. −7 • (−14) 98
8. 5 • (−62) −310
9. −10 • (−19) 190
10. 6 • (−81) −486
11. 0 • (−99) 0
12. −47 • 9 −423

Evaluate 12*n* for each value of *n*.

13. *n* = 18 216
14. *n* = −7 −84
15. *n* = −11 −132
16. *n* = −25 −300
17. *n* = 150 1,800
18. *n* = −67 −804

Evaluate each expression for the given value of the variable.

19. −8*w*, *w* = 15 −120
20. 11*v*, *v* = −9 −99
21. *n* • 13, *n* = −40 −520
22. −9*m*, *m* = −70 630
23. *z* • 28, *z* = −8 −224
24. (*c*)(−19), *c* = −20 380

25. Name two integers whose product is −24 and whose sum is 2.

−4 and 6

26. Name two integers whose product is −15 and whose sum is 2.

−3 and 5

27. Name two integers whose product is −18 and whose difference between the greatest and least number is 9.

3 and −6 or −3 and 6

28. Name two integers whose product is 12 and whose difference between the greatest and least number is 4.

−2 and −6 or 2 and 6

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LESSON 11-6

Reteach

Multiplying Integers

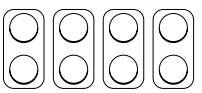
You can use two-color counters to multiply integers.

Multiply −4 by 2.

First, think about the numerical expression in words.

−4 • 2 means "the opposite of 4 groups of 2."

Then use counters to represent the expression.



4 groups of 2

4 groups of 2 are 8.

The opposite of 8 is −8.

−4 • 2 = −8.

Use counters to find each product.

1. 3 • (−3) −9
2. −5 • (−1) 5
3. 2 • 3 6
4. −3 • 4 −12
5. −4 • (4) −16
6. 0 • (−3) 0
7. −11 • (1) −11
8. −6 • −2 12
9. −2 • (−4) 8
10. 7 • (−2) −14
11. 5 • 3 15
12. −8 • (−2) 16

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