

2-7 Multiplying Integers (Pages 99–103)

Use the following rules for multiplying integers.

Multiplying Integers with Different Signs	The product of two integers with different signs is negative.
Multiplying Integers with the Same Signs	The product of two integers with the same sign is positive.

EXAMPLES

Find the products.

A $13 \cdot (-12)$

The two integers have different signs. Their product is negative.

$3 \cdot (-12) = -36$

B $(-15)(-8)$

The two integers have the same sign. Their product is positive.

$(-15)(-8) = 120$

Try These Together

Solve each equation.

1. $y = 8(-12)$

2. $s = -6(9)$

3. $z = (15)(2)$

HINT: Remember, if the factors have the same sign, the product is positive. If the factors have different signs, the product is negative.

PRACTICE

Solve each equation.

4. $-4 \cdot 3 = z$

5. $c = 7(-5)$

6. $d = (-10)(2)$

7. $b = (4)(7)$

8. $t = -6(-2)$

9. $f = (13)(-2)$

10. $g = -10(2)(-3)$

11. $-6(-7)(-2) = a$

12. $14(4)(-1) = h$

Evaluate each expression.

13. $4y$, if $y = -7$

14. gh , if $g = 7$ and $h = -3$

15. $6t$, if $t = 8$

16. $-8d$, if $d = -4$

17. $9xy$, if $x = 2$ and $y = -1$

18. $-3x$, if $x = -13$

Find each product.

19. $7(6x)$

20. $-3gh(-2)$

21. $-14(3d)$

22. $-8x(-2y)$

23. $5n(-7)$

24. $-7(7)(-n)$

25. Standardized Test Practice The price of a share of stock changed by $-\$3$ each day for 5 days. What was the overall change in the price of a share of the stock for the 5-day period?

A $\$15$

B $\$8$

C $-\$8$

D $-\$15$

Answers: 1. -96 2. -54 3. 30 4. -12 5. -35 6. -20 7. 28 8. 12 9. -26 10. 60 11. -84 12. -56 13. -28 14. -21 15. 48 16. 32 17. -18 18. 39 19. 42x 20. 6gh 21. -42d 22. 16xy 23. 35n 24. 49n 25. D