NAME _____ DATE _____ PERIOD _____

Lesson 4 Reteach

Multiply Integers

The product of two integers with **different** signs is **negative**.

The product of two integers with the **same** sign is **positive**.

Example 1

Find 5(−2).

$5(-2) = -10$ The integers have different signs. The product is negative.

Example 2

Find −3(7).

$-3(7) = -21$ The integers have different signs. The product is negative.

Example 3

Find −6(−9).

$-6(-9) = 54$ The integers have the same sign. The product is positive.

Example 4

Find $(-7)^2$.

$(-7)^2 = (-7)(-7)$ There are 2 factors of −7.
$= 49$ The product is positive.

Example 5

Find −2(−3)(4).

$-2(-3)(4)$
$= 6(4)$ Multiply −2 and −3.
$= 24$ Multiply 6 and 4.

Exercises

Multiply.

1. $-5(8)$ **2.** $-3(-7)$ **3.** $10(-8)$

4. $-8(3)$ **5.** $-12(-12)$ **6.** $(-8)^2$

7. $-5(7)$ **8.** $3(-2)$ **9.** $-6(-3)$

10. $5(-4)(5)$ **11.** $-4(-4)$ **12.** $2(-3)(5)$

13. $-2(-3)$ **14.** $9(-4)$ **15.** $(-3)(-4)$

16. $-3(-3)(5)$ **17.** $-2(5)^2$ **18.** $(-3)(-4)(5)$

NAME _____ DATE _____ PERIOD _____

Lesson 5 Reteach

Divide Integers

The quotient of two integers with different signs is negative.

The quotient of two integers with the same sign is positive.

Example 1

Find $30 \div (-5)$.

$30 \div (-5)$ The integers have different signs.

$30 \div (-5) = -6$ The quotient is negative.

Example 2

Find $-100 \div (-5)$.

$-100 \div (-5)$ The integers have the same sign.

$-100 \div (-5) = 20$ The quotient is positive.

Exercises

Divide.

1. $-12 \div 4$

2. $-14 \div (-7)$

3. $\frac{18}{-2}$

4. $-6 \div (-3)$

5. $-10 \div 10$

6. $\frac{-80}{-20}$

7. $350 \div (-25)$

8. $-420 \div (-3)$

9. $\frac{540}{45}$

10. $\frac{-256}{16}$

ALGEBRA Evaluate each expression if $d = -24$, $e = -4$, and $f = 8$.

11. $12 \div e$

12. $40 \div f$

13. $d \div 6$

14. $d \div e$

15. $f \div e$

16. $e^2 \div f$

17. $\frac{-d}{e}$

18. $ef \div 2$

19. $\frac{f + 8}{-4}$

20. $\frac{d - e}{5}$