

Another Look

For use with Lesson 2-6.

Multiplication and Division of Integers

Use multiplication to check that each quotient is correct.

$$\begin{array}{cccc} 12 \div 4 = 3 & -12 \div 4 = -3 & 12 \div -4 = -3 & -12 \div -4 = 3 \\ 12 \div 3 = 4 & -12 \div -3 = 4 & 12 \div -3 = -4 & -12 \div 3 = -4 \end{array}$$

Using the set of equations above as a model, complete each sentence.

- When dividing a positive number by a positive number, the quotient is _____.
- When dividing a negative number by a positive number, the quotient is _____.
- When dividing a positive number by a negative number, the quotient is _____.
- When dividing a negative number by a negative number, the quotient is _____.
- When dividing two numbers with like signs, the quotient is _____.
- When dividing two numbers with unlike signs, the quotient is _____.

Decide if each quotient will be positive or negative, then find the quotients. Use multiplication to check your answers.

$$\begin{array}{ccc} 7. \frac{-12}{2} = \underline{\hspace{2cm}} & 8. \frac{-25}{-5} = \underline{\hspace{2cm}} & 9. \frac{-32}{-8} = \underline{\hspace{2cm}} \\ 10. 12 \div -6 = \underline{\hspace{2cm}} & 11. -48 \div -8 = \underline{\hspace{2cm}} & 12. -48 \div -6 = \underline{\hspace{2cm}} \\ 13. -54 \div -6 = \underline{\hspace{2cm}} & 14. 36 \div -9 = \underline{\hspace{2cm}} & 15. -15 \div 15 = \underline{\hspace{2cm}} \\ 16. \frac{40}{-5} = \underline{\hspace{2cm}} & 17. \frac{-7}{-1} = \underline{\hspace{2cm}} & 18. \frac{-45}{9} = \underline{\hspace{2cm}} \end{array}$$

Perform the operations inside the parentheses first.

$$\begin{array}{ccc} 19. (3 \times -4) \div -6 & 20. 8 + (10 \div -5) & 21. (-8 \times -5) \div 4 \\ \underline{\hspace{2cm}} & \underline{\hspace{2cm}} & \underline{\hspace{2cm}} \\ 22. \frac{(20 - 8)}{-6} & 23. \frac{(-8 + -8)}{4} & 24. \frac{(6 \times -4)}{2} \\ \underline{\hspace{2cm}} & \underline{\hspace{2cm}} & \underline{\hspace{2cm}} \end{array}$$