7-4 Solve and Write Multiplication Equations

Inverse Operations: operations that undo each other.

Addition and Subtraction

Multiplication and Division

Key Concept Division Property of Equality

Words	If you divide each side of an equation by the same non-zero number, the two sides remain equal.	
Examples	**Numbers**	**Algebra**
	$18 = 18$	$3x = 12$
	$\frac{18}{6} = \frac{18}{6}$	$\frac{3x}{3} = \frac{12}{3}$
	$3 = 3$	$x = 4$

Use the Division Property of Equality to solve for variable.

Examples:

$\frac{9c}{9} = \frac{36}{9}$

$a = 4$

$\frac{4h}{4} = \frac{32}{4}$

$h = 8$

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$\frac{27}{9} = \frac{9h}{9}$

$3 = h$

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$\frac{40}{-0.5} = \frac{-0.5r}{-0.5}$

$-80 = r$

$-80 = r$

A grocery store is selling 6 cans of cat food for $3. Write and solve a multiplication equation to find the cost of a can of cat food.

$\frac{6C}{6} = \frac{\$3}{6}$

$C = 0.5$

$C = \$0.50$

Earline has put $250 into her savings account. To do this, she made 10 deposits of the same amount. Write and solve a multiplication equation to find the amount of each deposit.

$\frac{10d}{10} = \frac{\$250}{10}$

$d = 25$

$d = \$25$