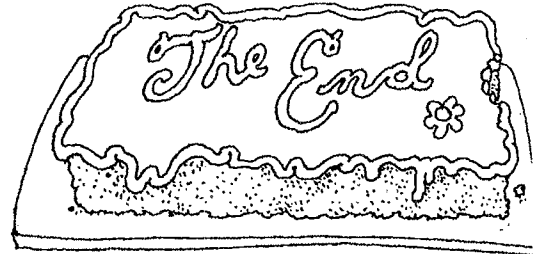


# Solve Equations Using Multiplication and Division

To solve multiplication and division equations, multiply or divide each side of the equation by the same number.

$4w = 24$  means "4 times a number equals 24"

$\frac{n}{3} = 7$  means "a number divided by 3 equals 7"



Solve:  $4w = 24$

Solve:  $\frac{n}{3} = 7$

Divide both sides by 4 to "undo" the multiplication.	
$4w \div 4 = 24 \div 4$	Check:
$w = 6$	$4 \times 6 = 24$

Multiply both sides by 3 to "undo" the division.	
$\frac{n}{3} \times 3 = 7 \times 3$	Check:
$n = 21$	$21 \div 3 = 7$

► Solve and check.

1.  $5n = 15$  \_\_\_\_\_

2.  $\frac{n}{3} = 9$  \_\_\_\_\_

3.  $6r = 42$  \_\_\_\_\_

4.  $\frac{n}{8} = 12$  \_\_\_\_\_

5.  $12y = 72$  \_\_\_\_\_

6.  $\frac{x}{9} = 20$  \_\_\_\_\_

7.  $7z = 0$  \_\_\_\_\_

8.  $\frac{n}{10} = 31$  \_\_\_\_\_

9.  $9y = 108$  \_\_\_\_\_

Write the equations. Then solve.

10. The product of a number and 8 is 56. What is the number?

\_\_\_\_\_

11. A number divided by 12 is 4. What is the number?

\_\_\_\_\_

12. The quotient of a number divided by 6 is 30. What is the number?

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