
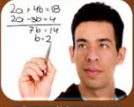





Algebra 1




Solving Multi-Step Equations: Part 2

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$$\begin{array}{r} 2x - 3 = 1 \\ +3 \quad +3 \\ \hline 2x \div 2 = 4 \div 2 \\ x = 2 \end{array}$$

Simplify The Equation
Combine Like-Terms
Distributive Property
Verifying Solutions








Overview

Point A





Point B

Solving Multi-Step Equations


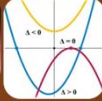
$4x - 6 + 3x + 5 = 9$
 $+7x - 1 = 9$
 $7x - 1 - 9 = 0 \quad 7x - 10 = 0$
 $7x = 9 + 1 \quad 7x = 10 \quad x = 10/7$

Combine Like-Terms
Solving Multi-Step Equations

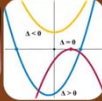
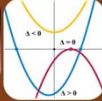
$2z + 3 = 4z - 9$

You Try

$2z - 2z + 3 + 9 = 4z - 2z - 9 + 9$
 $2z + 3 = 4z - 9$
 $12 = 2z$
 $12 \div 2 = 2z \div 2$
 $6 = z$

You Try

$4(x + 2) = 12$

$4x + 8 = 12$	$4(x + 2) \div 4 = 12 \div 4$
$4x = 12 - 8$	$x + 2 = 3$
$4x = 4$	$x = 3 - 2$
$x = 1$	$x = 1$

Solving Multi-Step Equations

$3(2a + 3) = 12$

You Try

$3(2a + 3) = 12$

$6a + 9 = 12$

$6a + 9 - 9 = 12 - 9$

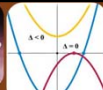
$6a = 3$

$a = .5$

You Try

$$3(2a + 3) = 12$$

$$y = mx + b$$



$$3(2a + 3) \div 3 = 12 \div 3$$

$$2a + 3 = 4$$

$$2a = 1$$

$$a = .5$$



You Try

$$3x + 6 = 2(x - 1)$$

$$3x + 6 = 2x - 2$$

$$3x - 2x = -2 - 6$$

$$x = -8$$

$$\frac{3x}{3} + \frac{6}{3} = \frac{2(x-1)}{3}$$



$$\frac{2x + 16 = 18}{2x - 18 = 12}$$

Solving Multi-Step Equations

$$3x + 6 = 2(x - 1)$$

$$3(-8) + 6 = 2(-8 - 1)$$

$$-24 + 6 = -16 - 2$$

$$-18 = -18$$

$$x = -8$$

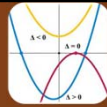
$$\frac{3x}{3} + \frac{6}{3} = \frac{2(x-1)}{3}$$



$$\frac{2x + 16 = 18}{2x - 18 = 12}$$

Solving Multi-Step Equations

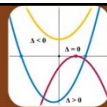
Solve for x and
verify your answer:



$$1.5(2x + 4) = 12$$

You Try 

Solve for x and
verify your answer:



$$1.5(2x + 4) = 12 \quad 1.5(2(2) + 4) = 12$$

$$3x + 6 = 12 \quad 1.5(4 + 4) = 12$$

$$3x = 6 \quad 1.5(8) = 12$$

$$x = 2 \quad 12 = 12$$

You Try 

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