

Solving Multi-Step Equations

Like Terms - Negative Coefficients

Name: _____ Date: _____



Solve the equations.

(1) $2x - 26 + x = 19$

(2) $x - 3x - 5 = 11$

(3) $-56 + 3x + 4x = 21$

(4) $-4x - 56 - 5x = 16$

(5) $-4x - 9 + x = 18$

(6) $4x - 35 + x = 35$

(7) $6x + 3x - 50 = 76$

(8) $-4x - 8 + 5x = 3$

(9) $-2x - 7 + x = 5$

(10) $-4x - x - 31 = 39$

(11) $-4x - 27 + x = 18$

(12) $-8 - 4x + 5x = 4$

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ANSWER KEY



Solve the equations.

$$(1) \quad 2x - 26 + x = 19$$

$$\begin{aligned} -26 + 3x &= 19 \\ 3x &= 45 \\ x &= 15 \end{aligned}$$

$$(2) \quad x - 3x - 5 = 11$$

$$\begin{aligned} -5 - 2x &= 11 \\ -2x &= 16 \\ x &= -8 \end{aligned}$$

$$(3) \quad -56 + 3x + 4x = 21$$

$$\begin{aligned} -56 + 7x &= 21 \\ 7x &= 77 \\ x &= 11 \end{aligned}$$

$$(4) \quad -4x - 56 - 5x = 16$$

$$\begin{aligned} -56 - 9x &= 16 \\ -9x &= 72 \\ x &= -8 \end{aligned}$$

$$(5) \quad -4x - 9 + x = 18$$

$$\begin{aligned} -9 - 3x &= 18 \\ -3x &= 27 \\ x &= -9 \end{aligned}$$

$$(6) \quad 4x - 35 + x = 35$$

$$\begin{aligned} -35 + 5x &= 35 \\ 5x &= 70 \\ x &= 14 \end{aligned}$$

$$(7) \quad 6x + 3x - 50 = 76$$

$$\begin{aligned} -50 + 9x &= 76 \\ 9x &= 126 \\ x &= 14 \end{aligned}$$

$$(8) \quad -4x - 8 + 5x = 3$$

$$\begin{aligned} -8 + x &= 3 \\ x &= 11 \end{aligned}$$

$$(9) \quad -2x - 7 + x = 5$$

$$\begin{aligned} -7 - x &= 5 \\ -x &= 12 \\ x &= -12 \end{aligned}$$

$$(10) \quad -4x - x - 31 = 39$$

$$\begin{aligned} -31 - 5x &= 39 \\ -5x &= 70 \\ x &= -14 \end{aligned}$$

$$(11) \quad -4x - 27 + x = 18$$

$$\begin{aligned} -27 - 3x &= 18 \\ -3x &= 45 \\ x &= -15 \end{aligned}$$

$$(12) \quad -8 - 4x + 5x = 4$$

$$\begin{aligned} -8 + x &= 4 \\ x &= 12 \end{aligned}$$