Solving Multi-Step Equations

Variables on Both Sides - No Negative Coefficients

Name: _____   **Date:** _____

👉 Solve the equations.

(1) $^-54 + 6x = {}^-3x + 36$

(2) $3x - 22 = 13 - 2x$

(3) $6x - 72 = -x + 26$

(4) $^-22 + x = 32 - 5x$

(5) $^-15 - x = 9 - 3x$

(6) $^-15 + 6x = 18 + 3x$

(7) $3x - 19 = {}^-2x + 16$

(8) $^-45 + 5x = 15 + x$

(9) $^-46 + 2x = 14 - 3x$

(10) $^-23 - 3x = {}^-6x + 22$

(11) $5x - 5 = 3x + 9$

(12) $5x - 9 = 18 + 2x$

Solving Multi-Step Equations
Variables on Both Sides - No Negative Coefficients
ANSWER KEY

👉 Solve the equations.

(1) $^-54 + 6x = ^-3x + 36$
$^-54 + 9x = 36$
$9x = 90$
$x = 10$

(2) $3x - 22 = 13 - 2x$
$^-22 + 5x = 13$
$5x = 35$
$x = 7$

(3) $6x - 72 = -x + 26$
$^-72 + 7x = 26$
$7x = 98$
$x = 14$

(4) $^-22 + x = 32 - 5x$
$^-22 + 6x = 32$
$6x = 54$
$x = 9$

(5) $^-15 - x = 9 - 3x$
$^-15 + 2x = 9$
$2x = 24$
$x = 12$

(6) $^-15 + 6x = 18 + 3x$
$^-15 + 3x = 18$
$3x = 33$
$x = 11$

(7) $3x - 19 = ^-2x + 16$
$^-19 + 5x = 16$
$5x = 35$
$x = 7$

(8) $^-45 + 5x = 15 + x$
$^-45 + 4x = 15$
$4x = 60$
$x = 15$

(9) $^-46 + 2x = 14 - 3x$
$^-46 + 5x = 14$
$5x = 60$
$x = 12$

(10) $^-23 - 3x = ^-6x + 22$
$^-23 + 3x = 22$
$3x = 45$
$x = 15$

(11) $5x - 5 = 3x + 9$
$^-5 + 2x = 9$
$2x = 14$
$x = 7$

(12) $5x - 9 = 18 + 2x$
$^-9 + 3x = 18$
$3x = 27$
$x = 9$