Solving Multi-Step Equations

Variables on Both Sides - No Negative Coefficients

Name: _____ **Date:** _____

Solve the equations.

(1) $^{-}9 - 6x = 16 - 7x$

(2) $10x - 70 = x + 155$

(3) $11x - 24 = 8x + 12$

(4) $^{-}3x - 57 = 87 - 12x$

(5) $^{-}74 + 11x = 6x + 56$

(6) $^{-}48 + x = {}^{-}4x + 12$

(7) $11x - 71 = 111 - 3x$

(8) $^{-}31 + 10x = 6x + 45$

(9) $^{-}48 + 3x = {}^{-}5x + 112$

(10) $^{-}64 + 2x = {}^{-}6x + 72$

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ANSWER KEY

Solve the equations.

(1) $^{-}9 - 6x = 16 - 7x$

$^{-}9 + x = 16$

$x = 25$

(2) $10x - 70 = x + 155$

$^{-}70 + 9x = 155$

$9x = 225$

$x = 25$

(3) $11x - 24 = 8x + 12$

$^{-}24 + 3x = 12$

$3x = 36$

$x = 12$

(4) $^{-}3x - 57 = 87 - 12x$

$^{-}57 + 9x = 87$

$9x = 144$

$x = 16$

(5) $^{-}74 + 11x = 6x + 56$

$^{-}74 + 5x = 56$

$5x = 130$

$x = 26$

(6) $^{-}48 + x = {}^{-}4x + 12$

$^{-}48 + 5x = 12$

$5x = 60$

$x = 12$

(7) $11x - 71 = 111 - 3x$

$^{-}71 + 14x = 111$

$14x = 182$

$x = 13$

(8) $^{-}31 + 10x = 6x + 45$

$^{-}31 + 4x = 45$

$4x = 76$

$x = 19$

(9) $^{-}48 + 3x = {}^{-}5x + 112$

$^{-}48 + 8x = 112$

$8x = 160$

$x = 20$

(10) $^{-}64 + 2x = {}^{-}6x + 72$

$^{-}64 + 8x = 72$

$8x = 136$

$x = 17$