Solving Multi-Step Equations

Distributive With Parentheses - No Negative Coefficients

Name: _____ **Date:** _____

👉 Solve the equations.

(1) $4x + 6(4x - 14) = 196$

(2) $4x + 7(x - 2) = 85$

(3) $2x + 2(7x - 16) = 128$

(4) $2x + 4(6x - 18) = 58$

(5) $3x + 2(3x + 18) = 126$

(6) $5x + 6(2x - 10) = 76$

(7) $3x + 4(3x + 3) = 132$

(8) $7x + 3(2x - 11) = 45$

(9) $7x + 2(3x - 2) = 87$

(10) $5x + 4(x + 18) = 162$

👉 Solve the equations.

(1) $4x + 6(4x - 14) = 196$
$4x + 24x - 84 = 196$
$28x - 84 = 196$
$28x = 280$
$x = 10$

(2) $4x + 7(x - 2) = 85$
$4x + 7x - 14 = 85$
$11x - 14 = 85$
$11x = 99$
$x = 9$

(3) $2x + 2(7x - 16) = 128$
$2x + 14x - 32 = 128$
$16x - 32 = 128$
$16x = 160$
$x = 10$

(4) $2x + 4(6x - 18) = 58$
$2x + 24x - 72 = 58$
$26x - 72 = 58$
$26x = 130$
$x = 5$

(5) $3x + 2(3x + 18) = 126$
$3x + 6x + 36 = 126$
$9x + 36 = 126$
$9x = 90$
$x = 10$

(6) $5x + 6(2x - 10) = 76$
$5x + 12x - 60 = 76$
$17x - 60 = 76$
$17x = 136$
$x = 8$

(7) $3x + 4(3x + 3) = 132$
$3x + 12x + 12 = 132$
$15x + 12 = 132$
$15x = 120$
$x = 8$

(8) $7x + 3(2x - 11) = 45$
$7x + 6x - 33 = 45$
$13x - 33 = 45$
$13x = 78$
$x = 6$

(9) $7x + 2(3x - 2) = 87$
$7x + 6x - 4 = 87$
$13x - 4 = 87$
$13x = 91$
$x = 7$

(10) $5x + 4(x + 18) = 162$
$5x + 4x + 72 = 162$
$9x + 72 = 162$
$9x = 90$
$x = 10$