

Solving Multi-Step Equations

With Parentheses Division - Negative Coefficients

Name: _____ Date: _____



Solve the equations.

(1) $\frac{-5x - 3}{-6} = 8$

(2) $\frac{8x + 5}{-7} = 5$

(3) $\frac{5x - 10}{-10} = -3$

(4) $\frac{9x - 9}{-6} = -12$

(5) $\frac{7x - 15}{-8} = -6$

(6) $\frac{-8x - 8}{8} = 6$

(7) $\frac{9x + 13}{7} = 16$

(8) $\frac{7x + 11}{-9} = 5$

(9) $\frac{-6x - 4}{8} = -8$

(10) $\frac{-5x - 3}{9} = 3$

(11) $\frac{7x - 9}{5} = 15$

(12) $\frac{-7x - 7}{7} = 5$

(13) $\frac{-9x + 15}{-10} = 3$

(14) $\frac{-10x + 11}{9} = -11$

(15) $\frac{6x - 6}{-6} = -11$

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ANSWER KEY



Solve the equations.

$$(1) \quad \frac{-5x - 3}{-6} = 8$$

$$-5x - 3 = -48$$

$$-5x = -45$$

$$x = 9$$

$$(2) \quad \frac{8x + 5}{-7} = 5$$

$$8x + 5 = -35$$

$$8x = -40$$

$$x = -5$$

$$(3) \quad \frac{5x - 10}{-10} = -3$$

$$5x - 10 = 30$$

$$5x = 40$$

$$x = 8$$

$$(4) \quad \frac{9x - 9}{-6} = -12$$

$$9x - 9 = 72$$

$$9x = 81$$

$$x = 9$$

$$(5) \quad \frac{7x - 15}{-8} = -6$$

$$7x - 15 = 48$$

$$7x = 63$$

$$x = 9$$

$$(6) \quad \frac{-8x - 8}{8} = 6$$

$$-8x - 8 = 48$$

$$-8x = 56$$

$$x = -7$$

$$(7) \quad \frac{9x + 13}{7} = 16$$

$$9x + 13 = 112$$

$$9x = 99$$

$$x = 11$$

$$(8) \quad \frac{7x + 11}{-9} = 5$$

$$7x + 11 = -45$$

$$7x = -56$$

$$x = -8$$

$$(9) \quad \frac{-6x - 4}{8} = -8$$

$$-6x - 4 = -64$$

$$-6x = -60$$

$$x = 10$$

$$(10) \quad \frac{-5x - 3}{9} = 3$$

$$-5x - 3 = 27$$

$$-5x = 30$$

$$x = -6$$

$$(11) \quad \frac{7x - 9}{5} = 15$$

$$7x - 9 = 75$$

$$7x = 84$$

$$x = 12$$

$$(12) \quad \frac{-7x - 7}{7} = 5$$

$$-7x - 7 = 35$$

$$-7x = 42$$

$$x = -6$$

$$(13) \quad \frac{-9x + 15}{-10} = 3$$

$$-9x + 15 = -30$$

$$-9x = -45$$

$$x = 5$$

$$(14) \quad \frac{-10x + 11}{9} = -11$$

$$-10x + 11 = -99$$

$$-10x = -110$$

$$x = 11$$

$$(15) \quad \frac{6x - 6}{-6} = -11$$

$$6x - 6 = 66$$

$$6x = 72$$

$$x = 12$$