



Polynomial, Second-Degree Equation, Quadratic

Name _____

Date _____

Find the roots of a second-degree equation.

(1) $90x^2 + 117x + 35 = 0$

(2) $150x^2 + 55x - 112 = 0$

(3) $5x^2 + 21x + 18 = 0$

(4) $-6x^2 + 7x + 3 = 0$

(5) $-15x^2 + 19x - 6 = 0$

(6) $2x^2 + x - 6 = 0$

(7) $-20x^2 + x + 99 = 0$

(8) $3x^2 + 44x + 160 = 0$

(9) $11x^2 - 159x - 90 = 0$

(10) $7x^2 + 74x + 144 = 0$

(11) $-20x^2 + 192x - 187 = 0$

(12) $-7x^2 + 19x + 0 = 0$



Answers

Find the roots of a second-degree equation.

$$(1) \quad 90x^2 + 117x + 35 = 0$$

$$x = -\frac{5}{6}, \quad x = -\frac{7}{15}$$

$$(3) \quad 5x^2 + 21x + 18 = 0$$

$$x = -\frac{6}{5}, \quad x = -3$$

$$(5) \quad -15x^2 + 19x - 6 = 0$$

$$x = \frac{3}{5}, \quad x = \frac{2}{3}$$

$$(7) \quad -20x^2 + x + 99 = 0$$

$$x = -\frac{11}{5}, \quad x = \frac{9}{4}$$

$$(9) \quad 11x^2 - 159x - 90 = 0$$

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

$$(11) \quad -20x^2 + 192x - 187 = 0$$

$$x = \frac{17}{2}, \quad x = \frac{11}{10}$$

$$(2) \quad 150x^2 + 55x - 112 = 0$$

$$x = -\frac{16}{15}, \quad x = \frac{7}{10}$$

$$(4) \quad -6x^2 + 7x + 3 = 0$$

$$x = \frac{3}{2}, \quad x = -\frac{1}{3}$$

$$(6) \quad 2x^2 + x - 6 = 0$$

$$x = -2, \quad x = \frac{3}{2}$$

$$(8) \quad 3x^2 + 44x + 160 = 0$$

$$x = -\frac{20}{3}, \quad x = -8$$

$$(10) \quad 7x^2 + 74x + 144 = 0$$

$$x = -\frac{18}{7}, \quad x = -8$$

$$(12) \quad -7x^2 + 19x + 0 = 0$$

$$x = \frac{19}{7}, \quad x = 0$$