

Alg I 9.61

Date _____ Period _____

Solve each equation with the quadratic formula.

1) $x^2 - 2x - 3 = 0$

2) $k^2 + 5k - 6 = 0$

3) $k^2 - k - 12 = 0$

4) $x^2 - x - 6 = 0$

5) $2x^2 + 2x - 12 = 0$

6) $x^2 + 4 = 0$

Solve each equation by completing the square.

7) $n^2 - 10n + 24 = 0$

8) $x^2 - 8x + 15 = 0$

9) $x^2 - 10x + 3 = 0$

10) $p^2 + 10p - 21 = 0$

Find the x intercepts, vertex, and the axis of symmetry.

11) $n^2 + 3n - 18 = 0$

12) $p^2 - 5p = 0$

Answers to Alg I 9.61 (ID: 1)

- 1) $\{3, -1\}$ 2) $\{1, -6\}$ 3) $\{4, -3\}$ 4) $\{3, -2\}$
5) $\{2, -3\}$ 6) No solution. 7) $\{6, 4\}$ 8) $\{5, 3\}$
9) $\{5 + \sqrt{22}, 5 - \sqrt{22}\}$ 10) $\{-5 + \sqrt{46}, -5 - \sqrt{46}\}$ 11) $\{-6, 3\}$
12) $\{5, 0\}$