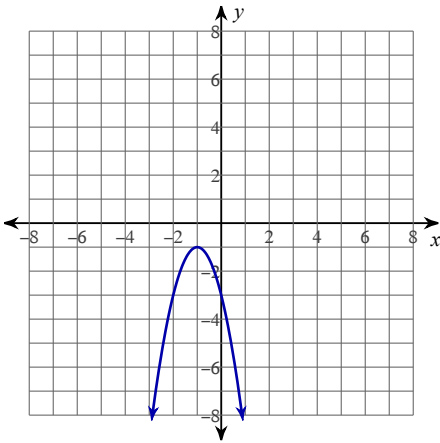


Solving Quadratics from Graphs

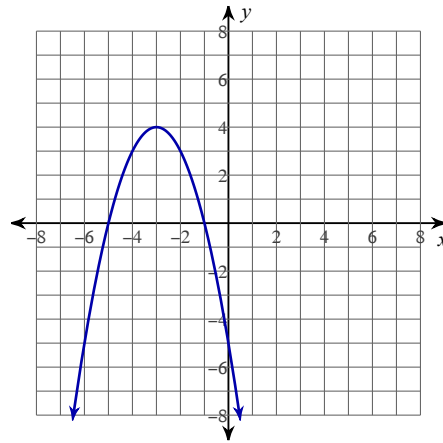
Date _____ Period _____

Use the graph to solve each quadratic equation.

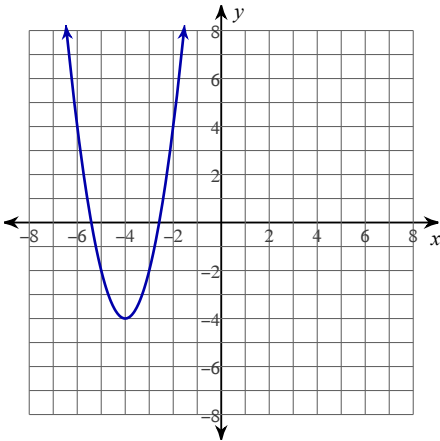
1) $-2x^2 - 4x - 3$



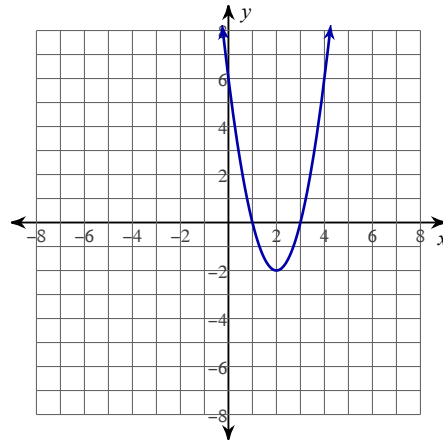
2) $-x^2 - 6x - 5$



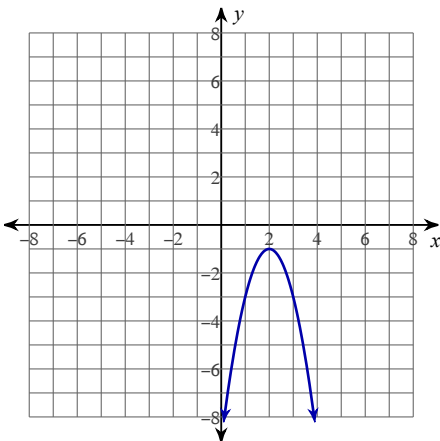
3) $2x^2 + 16x + 28$



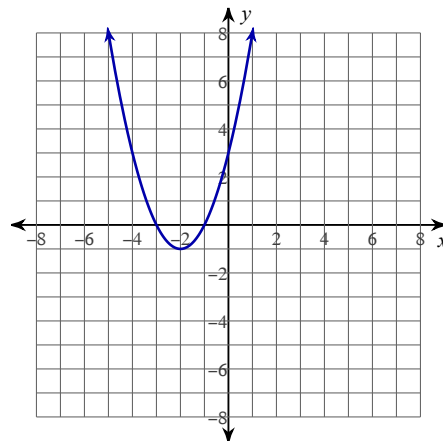
4) $2x^2 - 8x + 6$



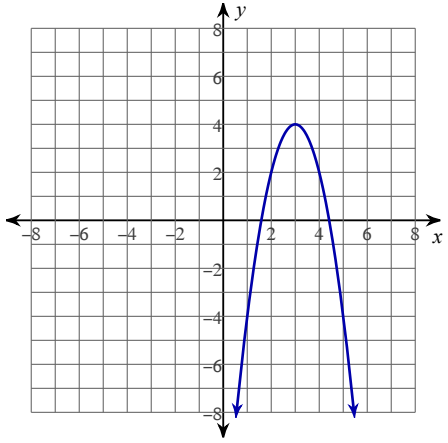
5) $-2x^2 + 8x - 9$



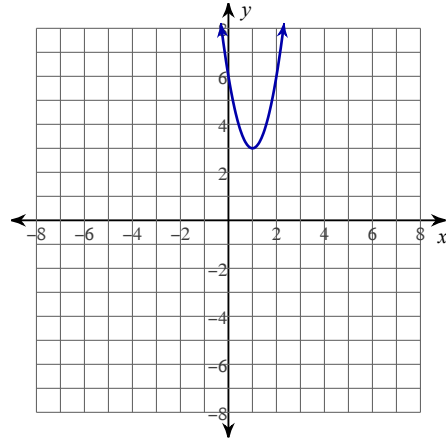
6) $x^2 + 4x + 3$



7) $-2x^2 + 12x - 14$



8) $3x^2 - 6x + 6$



Solve each equation by taking square roots.

9) $3(x + 2)^2 - 16 = 92$

10) $10n^2 - 8 = 292$

Solve each equation by completing the square.

11) $x^2 + 20x - 31 = -6$

12) $x^2 - 18x + 21 = -10$

Solve each equation by factoring.

13) $5b^2 + 32b = -12$

14) $3a^2 = -11a + 42$

Answers to Solving Quadratics from Graphs (ID: 1)

- 1) no solution 2) -1 and -5 3) about -5.4 and -2.6 4) 1 and 3
5) no solution 6) -3 and -1 7) about 1.6 and 4.4 8) no solution
9) {4, -8} 10) $\{\sqrt{30}, -\sqrt{30}\}$ 11) $\{-10 + 5\sqrt{5}, -10 - 5\sqrt{5}\}$
12) $\{9 + 5\sqrt{2}, 9 - 5\sqrt{2}\}$ 13) $\left\{-\frac{2}{5}, -6\right\}$ 14) $\left\{\frac{7}{3}, -6\right\}$