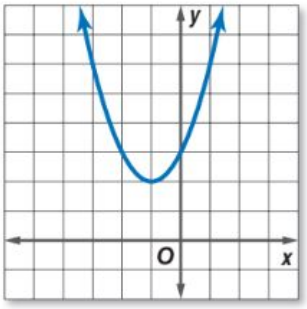
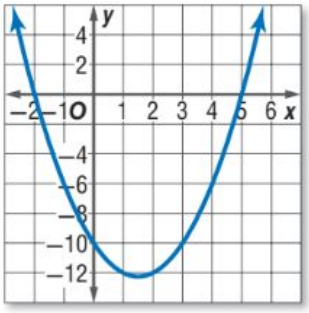
4.2 Solve Quadratic Equations by Graphing
4.3 Solving Quadratic Equations by Factoring
Honors Algebra 2

1. Use the related graph of the following to determine the solutions to the equation:

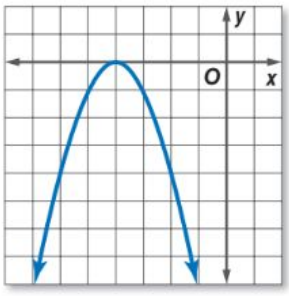
$x^2 + 2x + 3 = 0$



$x^2 - 3x - 10 = 0$



$-x^2 - 8x - 16 = 0$



2. Write a quadratic equation in standard form with the following roots:
   a. 2, 4
   b. $-\frac{1}{3}$, 6
   c. $\frac{3}{2}$, $\frac{1}{4}$

3. Find the roots of the following equations.
   a. $f(x) = 35x^2 - 15x$

b. $f(x) = x^2 - 4x - 21$

c. $y = x^2 - 36$

d. $h(x) = 2x^2 + 7x - 30$

e. $z(x) = 12x^2 - 2x - 2$