Intro. to Quadratics – Practice Questions

1. Explain how you can tell if a relation is quadratic from a:
   a. Graph

   b. Table

   c. Equation

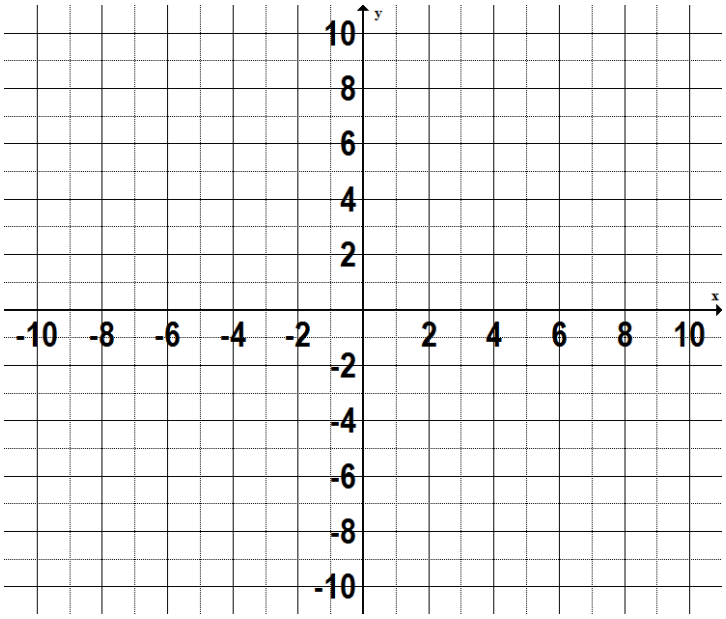
2. What are the zeroes of each quadratic relation?
   a. $y = 2(x - 3)(x + 4)$

   b. $y = -3x(x - 1)$

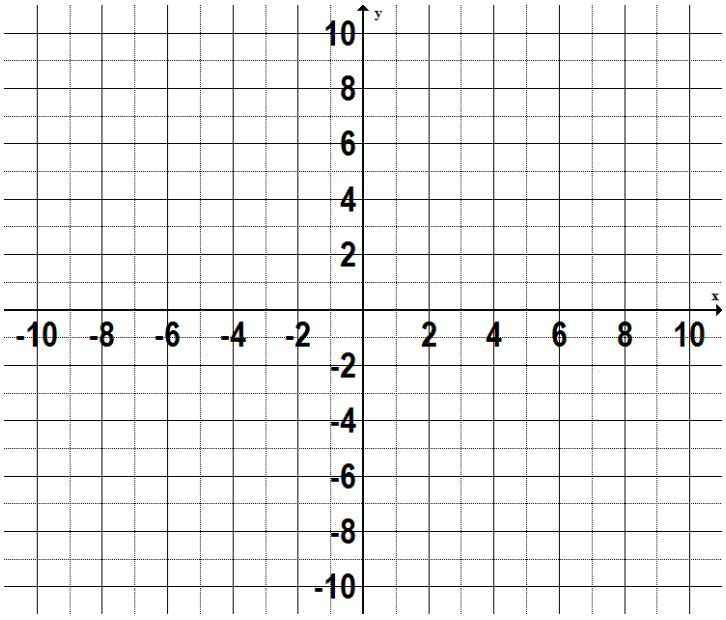
   c. $y = (x - 2)^2$

3. For each quadratic equation, determine the zeroes, axis of symmetry, vertex and y-intercept. Then, graph the relation.

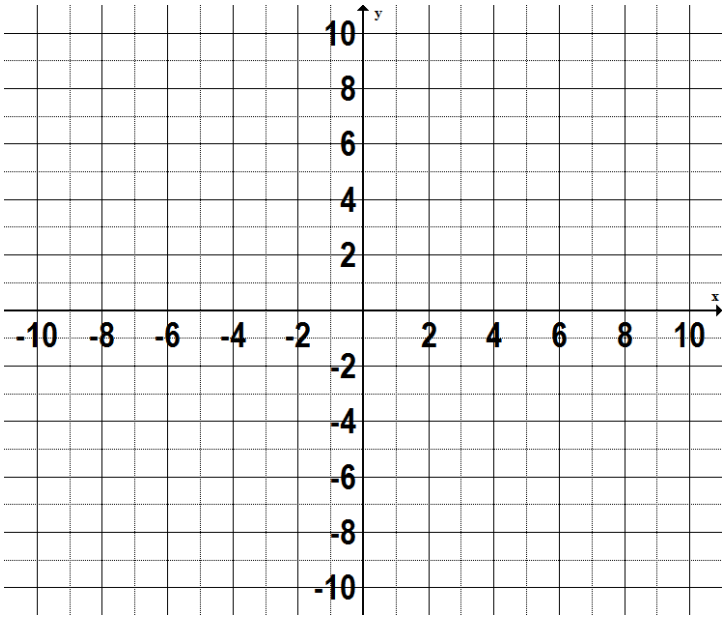
a. $y = 2(x - 1)(x + 5)$



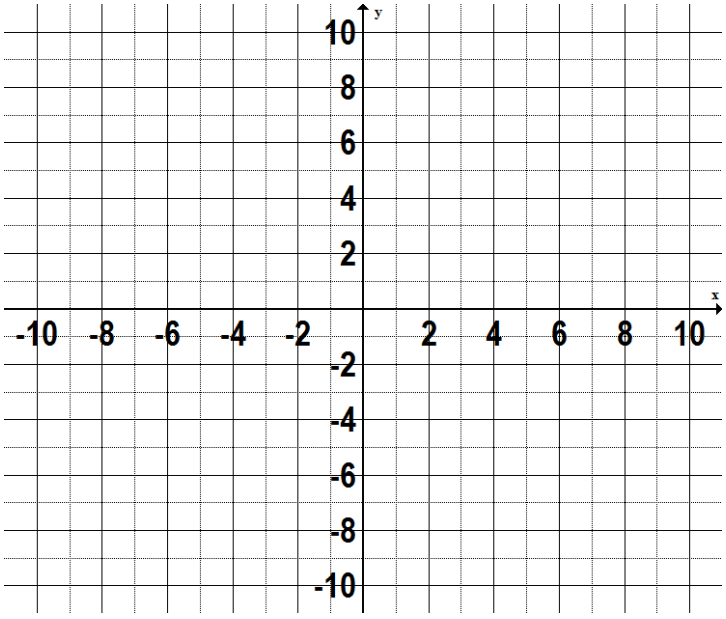
b. $y = -(x + 4)^2$



c. $y = -2x(x-2)^2$



d. $y = -2(x-2)(x+2)$



4. Expand each factored form quadratic equation into standard form.

   a. $y = (x - 3)(x + 5)$

   b. $y = -2(x - 1)(x + 4)$

   c. $y = -3x(x - 2)$

   d. $y = -4(x - 5)^2$

5. A parabola has zeroes x = 3, -5 and goes through the point (2, 21). Determine the factored form equation of the parabola.

6. Determine the equation of the parabola shown below.