Accelerated Math I
The Great Quadratic
CFA for Test 6

Name_____

Date ____/____/____ **Block** ____

Graphing Quadratic Equations (8 points each)

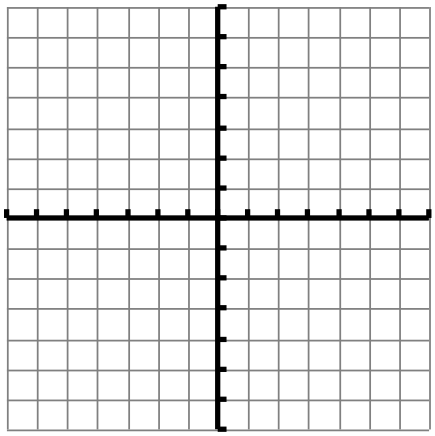
1. $f(x) = 2x^2 - 12x + 18$

   x-Intercept(s): _____ _____

   Vertex: _____

   Axis of Symmetry: _____

   y-intercept: _____



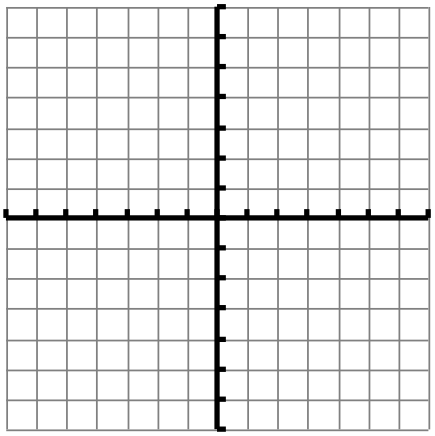
2. $g(x) = 2(x+2)(x+4)$

   x-Intercept(s): _____ _____

   Vertex: _____

   Axis of Symmetry: _____

   y-intercept: _____



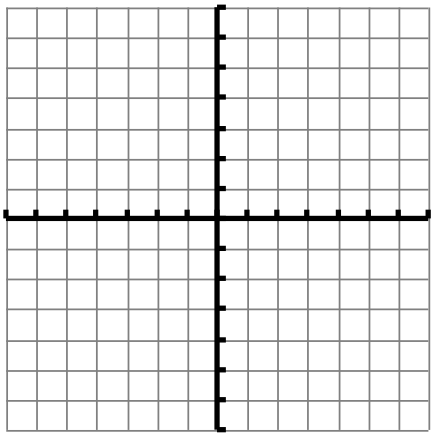
3. $h(x) = -(x-3)^2 + 4$

   x-Intercept(s): _____ _____

   Vertex: _____

   Axis of Symmetry: _____

   y-intercept: _____



Converting Quadratic Equations (3 points each)

4. Convert the following equations to standard form.

   a. $y = 2(x+5)^2 - 23$

   b. $y = 3(2x-3)(x-1)$

5. Convert the following equations to vertex form.

   a. $y = 4x^2 - 8x + 15$

   b. $y = (x+3)(x-9)$

6. Convert the following equations to intercept form.

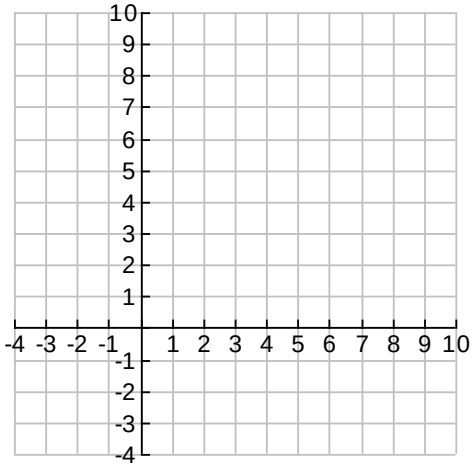
   a. $y = x^2 + 3x - 18$

   b. $y = 4x^2 + 5x - 6$

Quadratic Inequalities

(3 points each)

7. Graph $y < -2(x-4)^2 + 8$ (2 points)



8. Solve the following quadratic inequality algebraically

   $x^2 - x - 6 > 0$

9. Solve the following quadratic inequality algebraically

   $3x^2 - 4x \leq 0$