

Name: \_\_\_\_\_

Show work needed to justify your answer.

Date: \_\_\_\_\_

**HW: # 10:** Math IBSL - Standard 10 - Graphing Quadratic Functions

5 points

1. Write down the equation of the **axis of symmetry** and the coordinates of the **vertex** for the graph of each function.

**a**  $f(x) = 2(x - 3)^2 + 4$       **b**  $f(x) = (x - 1)^2 - 5$       **c**  $f(x) = -4(x + 3)^2 + 2$

2. Find the coordinates of the y-intercept, the equation for the Axis of Symmetry, and the coordinates of the vertex for each of the following:

**a**  $f(x) = x^2 - 8x + 5$       **b**  $f(x) = 3x^2 - 6x + 2$       **c**  $f(x) = -2x^2 - 8x - 11$

3. Find the coordinates of the x-intercepts, the equation for the axis of symmetry, and the coordinates of the vertex for the graph of each function.

**a**  $f(x) = (x - 2)(x - 4)$       **b**  $f(x) = 4(x + 3)(x - 1)$       **c**  $f(x) = -(x + 5)(x - 3)$