

Name: _____

This quiz covers: 3.1 and 3.2.

Directions: Complete all question and **show all applicable work.** Partial credit will be given. All questions are equally weighted.

1.) Sketch the graph of $f(x) = -x^3$.

2.) Find all the roots (aka zeros) of the following function and tell the multiplicity of each:

$$f(x) = 2(x + 3)^2(x + 1)(x - 6)$$

Name: _____

3.) Find the vertex, y-intercept and x-intercept(s) of the following function, then graph it.

$$y = x^2 - 8x + 15$$