

MATH 1513 – College Algebra
Quiz 7

Name:

Instructions: Show all work. Answers with no work shown will receive no credit.

1. Use the Leading-Term Test to sketch the end behavior of the graphs of the following functions:

a.) $f(x) = -3x^3 + 4x - 9$

b.) $f(x) = 5x^{14} - 12x^3 + 9x^2 - 5$

2. Determine the zeroes of the following polynomials and state whether the graph of the function crosses or is tangent to the x-axis at each zero. Then sketch the graph of each function with the zeroes and y-intercepts clearly labeled.

a.) $f(x) = (x - 3)^2(x + 2)^5(x + 4)$

b.) $f(x) = 4(x + 3)(x - 3)^3$