

In-Class Problems 11 for Wednesday, February 28

These problems are from [Pre-Class Problems 11](#).

Find the zeros (roots) and their multiplicities. Discuss the implication of the multiplicity on the graph of the polynomial. Determine the sign of the infinity that the polynomial values approaches as x approaches positive infinity and negative infinity. Use this information to determine the number of relative (local) extremum points (turning points) that the graph of the polynomial has. Sketch a graph of the polynomial.

1. $f(x) = x^3 - 8x^2 + 16x$

2. $g(x) = 2x(6 - x)(3x - 5)^2$