

Advanced Algebra

Polynomial Functions: Approximating Real Zeros of Polynomials – Homework

In the following polynomial functions, some of the roots are real and some are imaginary. Some of the real roots are rational and others are irrational. For each function, use the *Location Principle* to approximate each of its *real* roots to the nearest tenth. You'll need to make several calculations for each root, show these calculations in table form.

1. $y = 2x^2 - 5x + 1$

2. $y = x^4 - 3x^2 + x - 2$

3. $y = -2x^3 + 3x - 1$

4. $y = 15x^3 - 8x^2 - 9x + 2$