

Algebra Essentials and Applications Internet Activity

ME1 PolySolve Investigations

1. Which method described on the “Factoring Polynomials of Degree 3” site do you think is easier? Will the easier method always work?

2. What are the roots of $f(x) = (x + 2)^3 + (x + 2)^2$? What are the roots of $f(x) = (x + 1)^4 + (x + 1)^3$? Describe the method you used to solve these problems.

3. The first site, “Factoring Polynomials of Degree 3,” began the process of trial and error to find the roots of $18x^2 + 9x - 2$. Finish finding these roots.

4. What is the formula for solving an n th-degree polynomial? What is one method for solving polynomials of n th degree?

5. What are the roots of $p(x) = 4x^3 - 24x^2 + 45x - 25$?
