## **Unit 3: Polynomial Functions**

- 1. The polynomial function  $f(x) = x^3 4x^2 + 3x$  models a roller coaster's vertical height.
  - a. Find the x-intercepts and explain what they represent.
  - b. Describe the end behavior.
- 2. Create a 4th-degree polynomial with zeros at x = -2,0,1,3. Write it in factored form.