## **Exploration in Polynomials graphing**

Given the polynomial:

$$P(x) = x^4 - 4x^3 + 2x^2 + 4x - 3$$

- 1. How many terms are there in P(x)?
- 2. What is the degree of the polynomial?
- 3. What is the sign of the leading coefficient?

You can already determine the end-behavior of the graph.

- 4. Divide the polynomial by (x+1)
- 5. Divide the polynomial by (x-1)
- 6. Divide the polynomial by (x-1)

Plot the polynomial based on the above results, and compare your result with graphic calculator.

