$Polynomials_{\ take \ 2}$

While working in a group make sure you:

- Expect to make mistakes but be sure to reflect/learn from them!
- Are civil and are aware of your impact on others.
- Assume and engage with the strongest argument while assuming best intent.

A number z, is called a zero of a function p if p(z) = 0. Note: this number is also known as a root or as an x-intercept.



1. Find the roots of the graph on the left.



Find the zeros of the graph on the right.

- 2. Find the rule for the graph on the left.
- Find the rule for the graph on the right.

3. Given that the graph to the right is a cubic, find the rule.



4. Divide $2x^4 + x^3 - 16x^2 + 18$ by x + 2

5. The area of a rectangle is $2x^4 - 2x^3 + 11x^2 - 3x + 12$ cm². It's length is $x^2 - x + 4$ cm, find its width.