## Polynomials tate 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.
2. Find the rule for the graph on the left.


Find the zeros of the graph on the right.

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 $2 x^{4}+x^{3}-16 x^{2}+18$ by $x+2$
5. The area of a rectangle is $2 x^{4}-2 x^{3}+11 x^{2}-3 x+12 \mathrm{~cm}^{2}$. It's length is $x^{2}-x+4 \mathrm{~cm}$, find its width.

