

2.3 Polynomial Functions

Homework Help

Exercises

1. Start with $y = x^3$, shift to the right by 3 units and the stretch vertically by 2.

17. Hint: What is the degree?

What is the end behavior with the degree?

Where are the x-intercepts?

* Don't forget the end-behavior:

$$\lim_{x \rightarrow \infty} f(x) =$$

$$\lim_{x \rightarrow -\infty} f(x) =$$

33. Hint: Factor or apply the quadratic formula.

39. Hint: Find your zeros and the multiplicity.

An odd multiplicity: crosses the x-axis

An even multiplicity: touches the x-axis

43. Use your calculator to locate your zeros.

49. Factor or factor by grouping

54. Set up the zeros and FOIL.

64. a. Find where $P(x) = R(x) - C(x)$ is positive.

b. Find where $P(x) = 0$