

**Problem 1. Section 1.2 #86**

For the following exercises, for each polynomial, a. find the degree; b. find ...

a.  $\boxed{3}$

b.  $\boxed{1, -1, -3}$

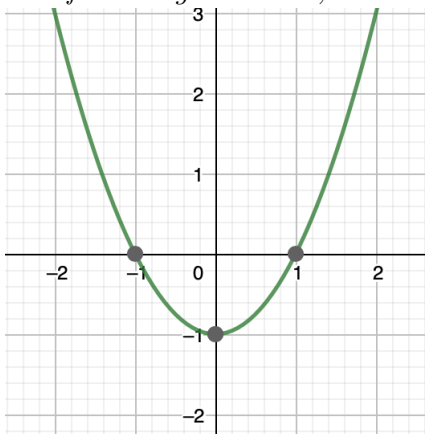
c.  $\boxed{-3}$

d.  $\boxed{f(x) \rightarrow \pm\infty \text{ as } x \rightarrow \pm\infty}$

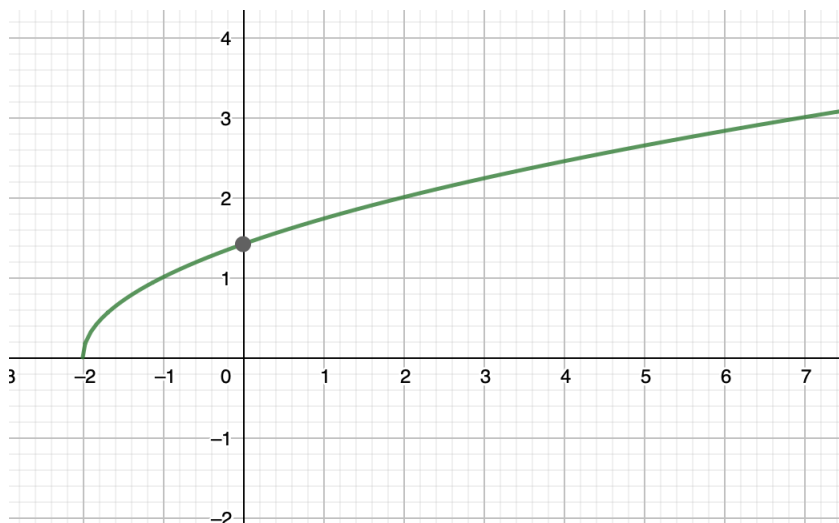
e.  $f(-x) = (-x)^3 + 3(-x)^2 - (-x) + 3 = -x^3 + x^2 + x + 3$ .  $\boxed{\text{neither}}$

**Problem 2. Section 1.2 #88**

For the following exercises, use the graph of  $f(x) = x^2$  to graph each transformed function  $g$

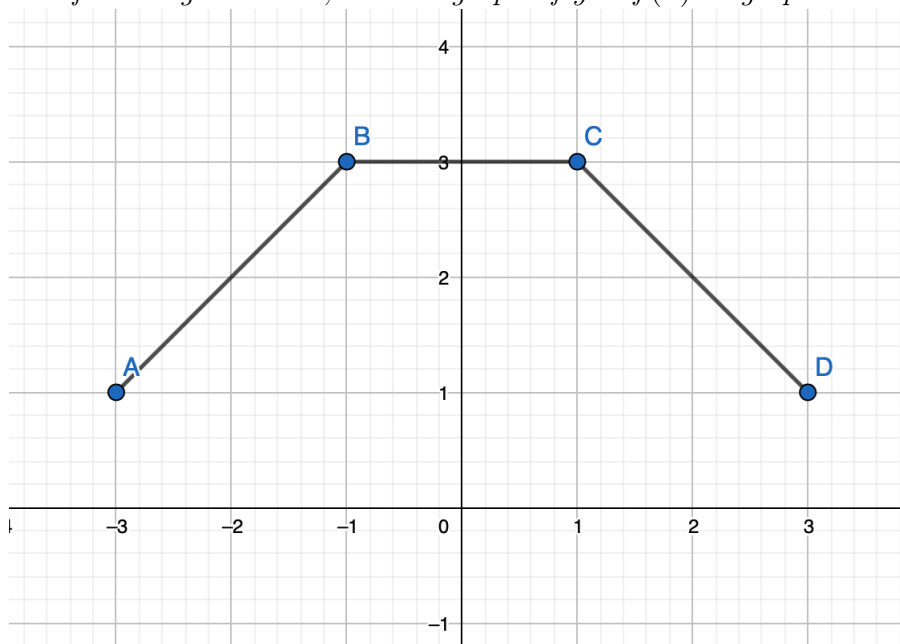
**Problem 3. Section 1.2 #90**

For the following exercises, use the graph of  $f(x) = \sqrt{x}$  to graph each transformed function  $g$



**Problem 4. Section 1.2 #92**

For the following exercises, use the graph of  $y = f(x)$  to graph each transformed function  $g$

**Problem 5. Section 1.2 #96**

For the following exercises, for each of the piecewise-defined ...

a.  $\boxed{h(0) = 1, h(\pi) = \pi + 1, h(5) = 6}$

