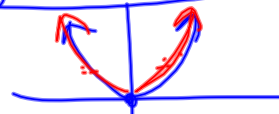


## Odd / Even Functions

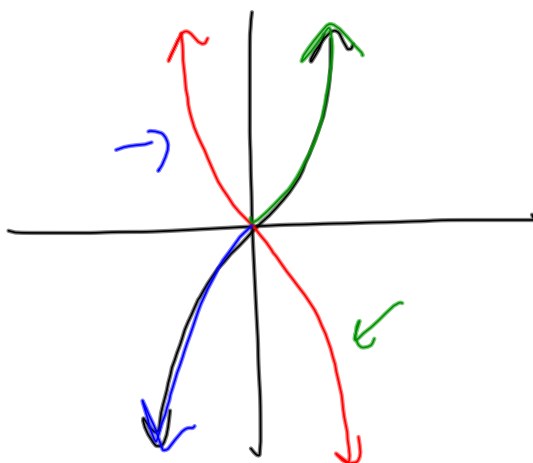
If a function is even,  $f(-x) = f(x)$   
 \* symmetric to the y-axis

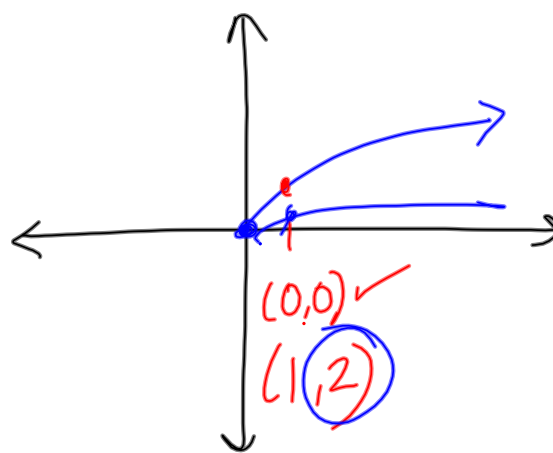
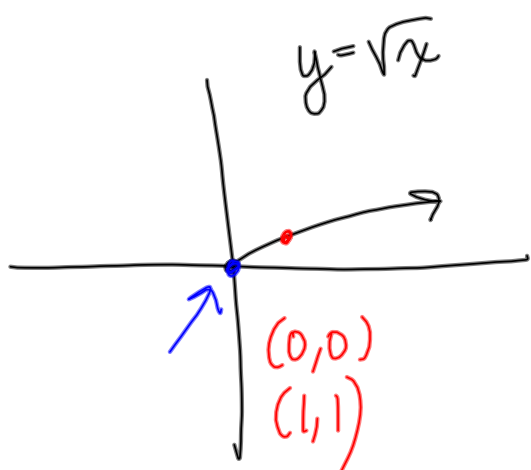
If a function is odd,  $f(-x) = -f(x)$   
 \* reflected across x and y-axes.

Ex:  $y = x^2 \rightarrow f(-x) = (-x)^2 = x^2 = f(x)$   
 even



Ex:  $y = x^3 \rightarrow f(-x) = (-x)^3 = -x^3 = -f(x)$





- a.  $y = 2\sqrt{x}$   $2 \cdot \sqrt{1}$
- b.  $y = \sqrt{2x}$   $\sqrt{2}$
- c.  $y = \sqrt{\frac{1}{2}x}$   $\sqrt{\frac{1}{2}}$
- d.  $y = \frac{1}{2}\sqrt{x}$   $\frac{1}{2} \cdot 1$  ✓