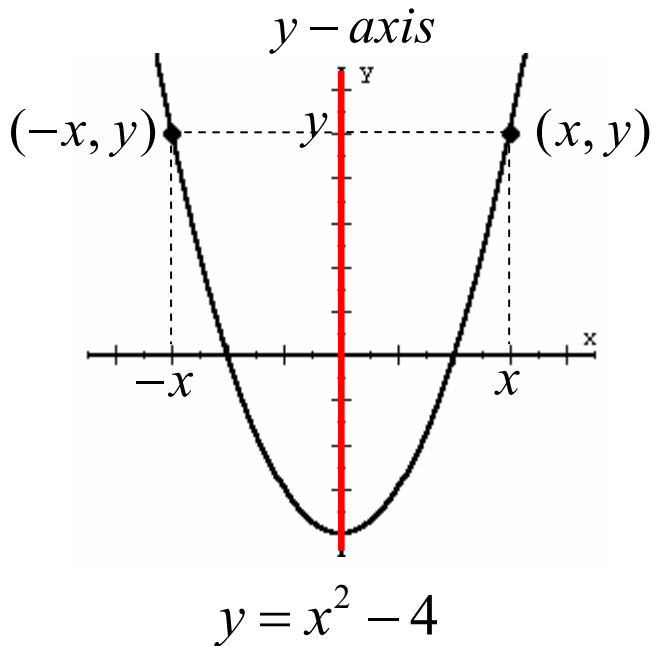


Symmetry about the y - axis



EVEN Function

$$f(-x) = f(x)$$

Replacing x with $-x$
Yields an equivalent equation.

$$f(x) = x^2 - 4$$

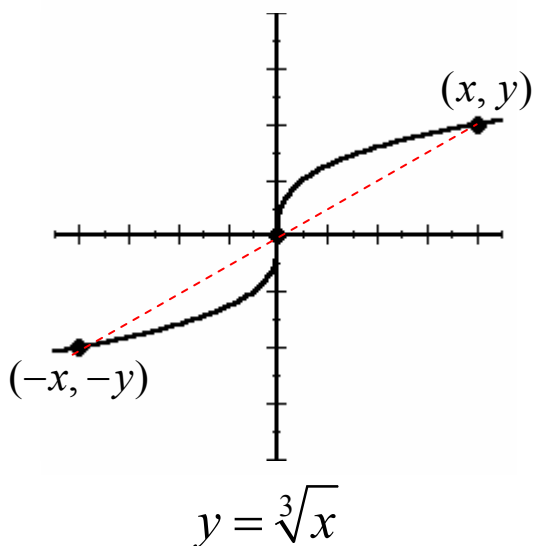
$$f(-x) = (-x)^2 - 4$$

$$f(-x) = x^2 - 4$$

$$f(-x) = f(x)$$

$\therefore f(x)$ is an even function

Symmetry about the Origin



ODD Function

$$f(-x) = -f(x)$$

Replacing x with $-x$ **and**
Replacing y with $-y$
Yields an equivalent equation.

$$f(x) = \sqrt[3]{x}$$

$$f(-x) = \sqrt[3]{-x}$$

$$f(-x) = -\sqrt[3]{x}$$

$$f(-x) = -f(x)$$

$\therefore f(x)$ is an odd function