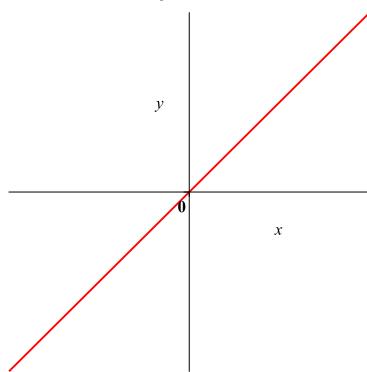


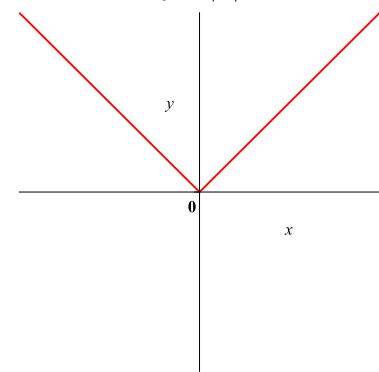
Basic Curves¹

Line

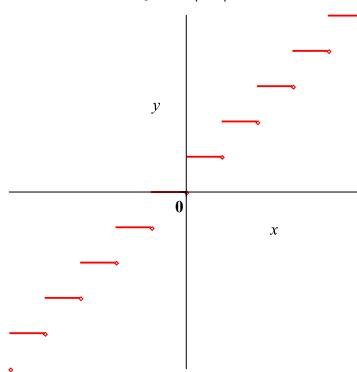
$$y = x$$

**Absolute Value**

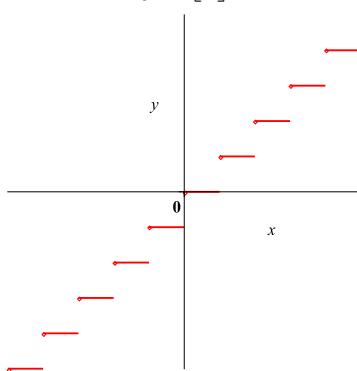
$$y = |x|$$

**Ceiling**

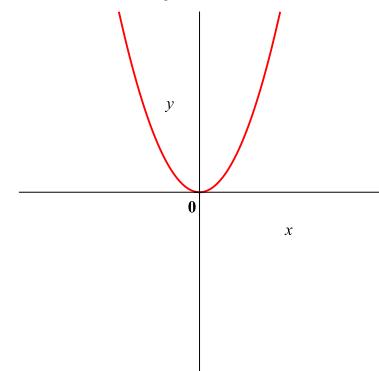
$$y = \lceil x \rceil$$

**Floor**

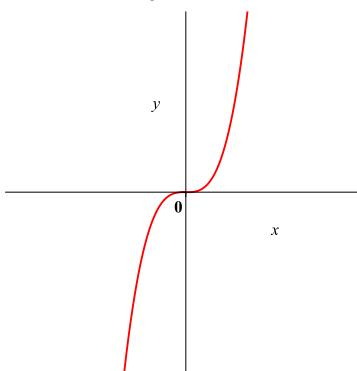
$$y = \lfloor x \rfloor$$

**Parabola**

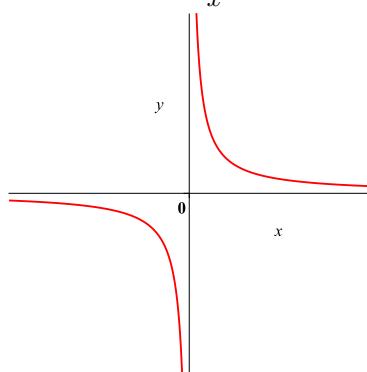
$$y = x^2$$

**Cubic**

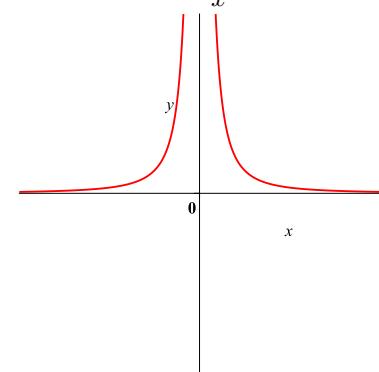
$$y = x^3$$

**Reciprocal**

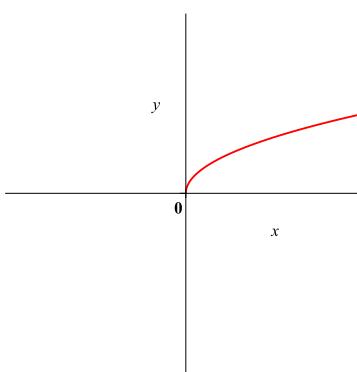
$$y = \frac{1}{x}$$

**Reciprocal Squared**

$$y = \frac{1}{x^2}$$

**Square Root**

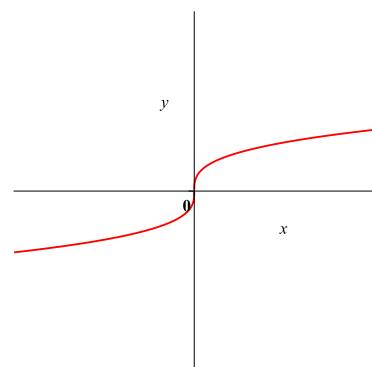
$$y = \sqrt{x}$$



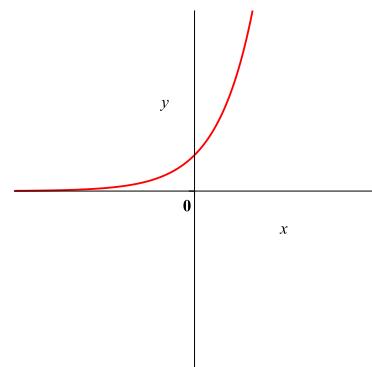
¹see also Trigonometric and Hyperbolic Curves ASC (June 9, 2020)

Cube Root

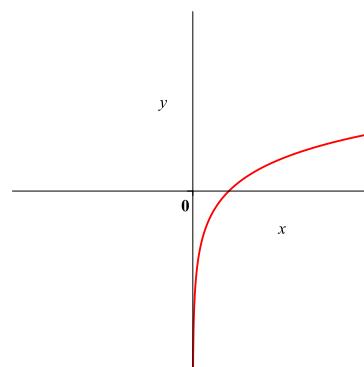
$$y = \sqrt[3]{x}$$

**Exponential**

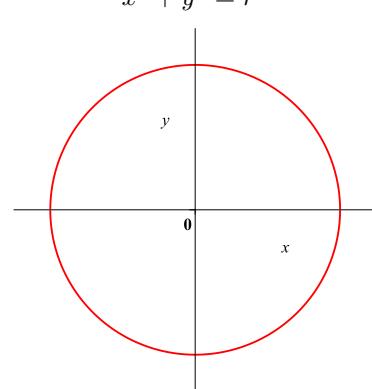
$$y = e^x$$

**Logarithm**

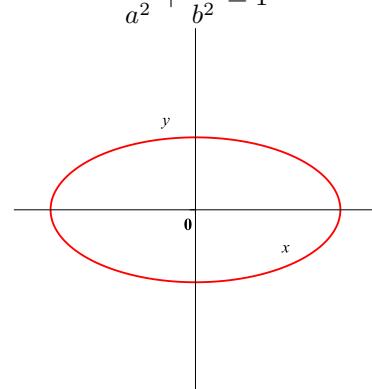
$$y = \ln x$$

**Circle**

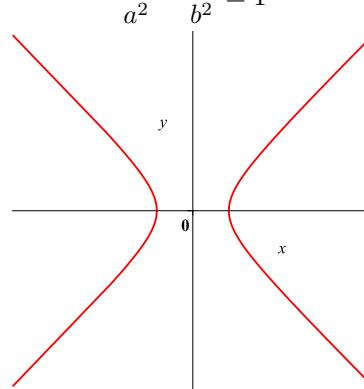
$$x^2 + y^2 = r^2$$

**Ellipse**

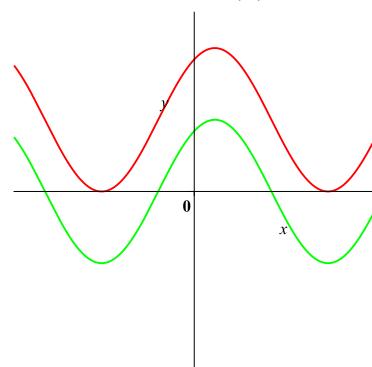
$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$

**Hyperbola**

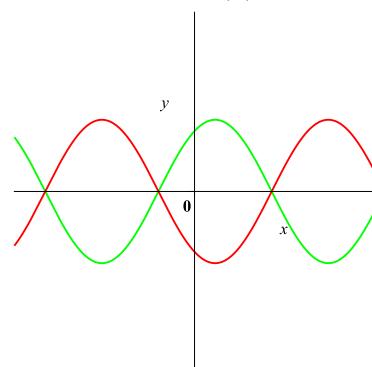
$$\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$$

**Vertical Translation**

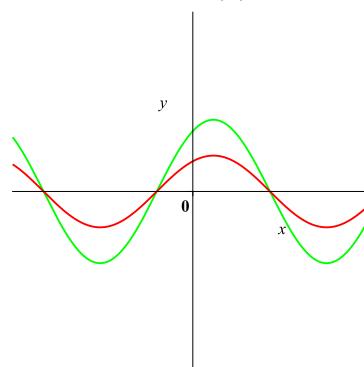
$$y + c = f(x)$$

**Vertical Reflection**

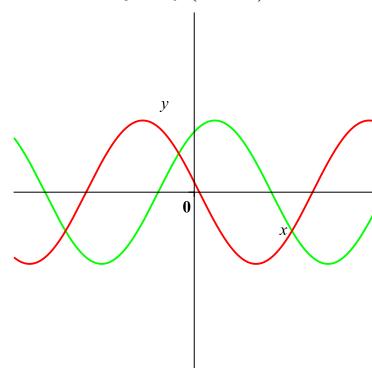
$$-y = f(x)$$

**Vertical Compression**

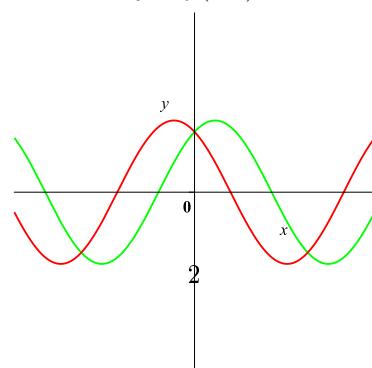
$$cy = f(x)$$

**Horizontal Translation**

$$y = f(x + c)$$

**Horizontal Reflection**

$$y = f(-x)$$

**Horizontal Compression**

$$y = f(cx)$$

