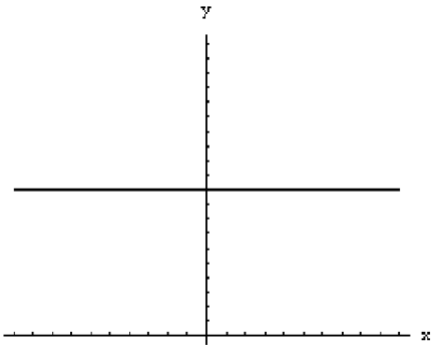
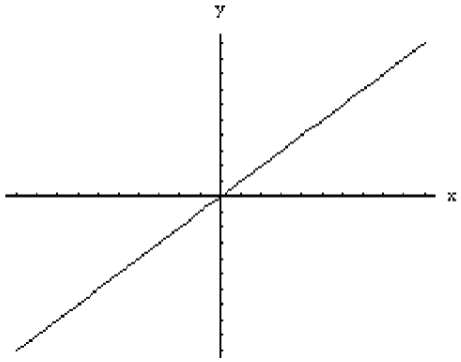
TOOL-KIT FUNCTIONS

The equation, graph, and domain and range for several useful functions are listed below. They're sure to be useful in algebra, pre-calculus, and beyond!

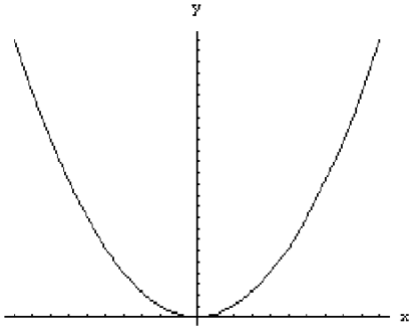
Name: Constant
Equation: $f(x) = c$
Domain: $\{x \mid x \in \Re\}$
Range: $\{y \mid y = c\}$
Graph:



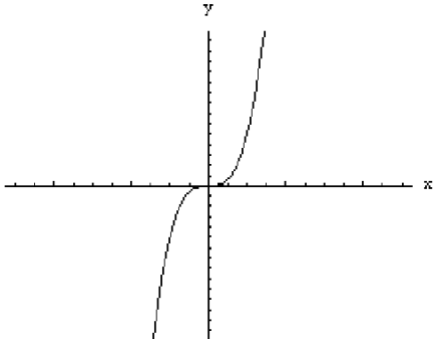
Name: Linear
Equation: $f(x) = x$
Domain: $\{x \mid x \in \Re\}$
Range: $\{y \mid y \in \Re\}$
Graph:



Name: Quadratic
Equation: $f(x) = x^2$
Domain: $\{x \mid x \in \Re\}$
Range: $\{y \mid y \geq 0\}$
Graph:



Name: Cubic
Equation: $f(x) = x^3$
Domain: $\{x \mid x \in \Re\}$
Range: $\{y \mid y \in \Re\}$
Graph:



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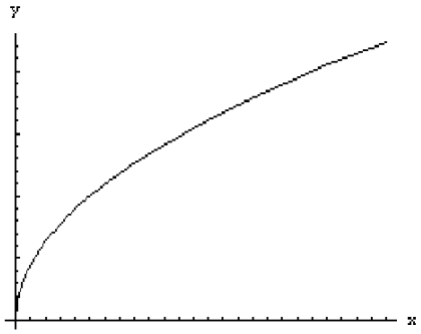
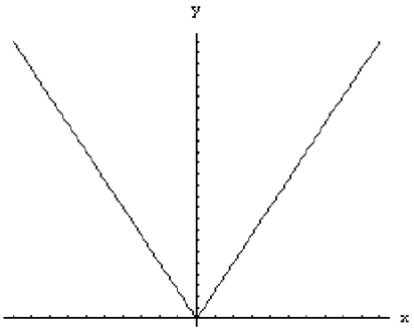
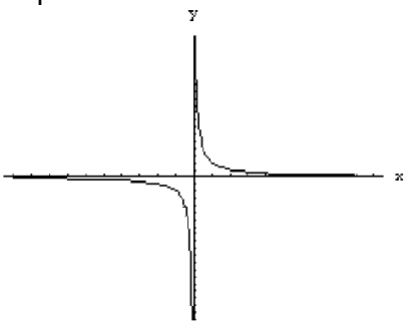
Name: Square Root
Equation: $f(x) = \sqrt{(x)}$
Domain: $\{x \mid x \geq 0\}$
Range: $\{y \mid y \geq 0\}$
Graph:



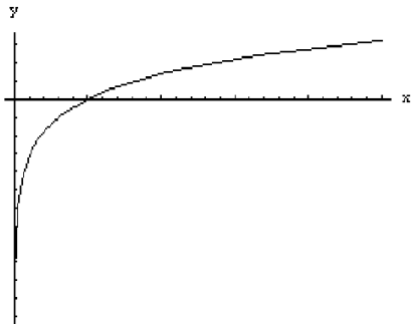
Name: Absolute Value
Equation: $f(x) = |x|$
Domain: $\{x \mid x \in \Re\}$
Range: $\{y \mid y \geq 0\}$
Graph:



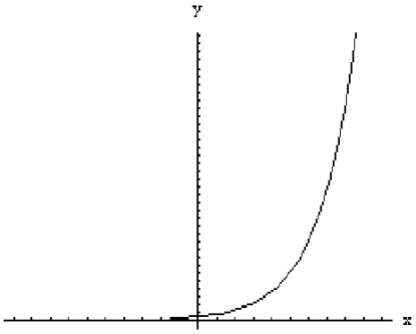
Name: Reciprocal
Equation: $f(x) = 1/x$
Domain: $\{x \mid x \in \Re, x \neq 0\}$
Range: $\{y \mid y \in \Re, y \neq 0\}$
Graph:



Name: Logarithmic
Equation: $f(x) = \ln x$
Domain: $\{x \mid x > 0\}$
Range: $\{y \mid y \in \Re\}$
Graph:



Name: Exponential
Equation: $f(x) = e^x$
Domain: $\{x \mid x \in \Re\}$
Range: $\{y \mid y > 0\}$
Graph:



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