Linear Function: y = x



Domain:

Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):

Quadratic Function: $y = x^2$



Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots):

x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):

Cubic Function: $y = x^3$



Domain:

Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):

General Polynomial: $y = ax^n$



Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):

What is the impact of the coefficients **a** and **n**?

Square Root Function: $y = \sqrt{x}$



Domain:

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Reciprocal (Rational): $\mathbf{y} = \frac{1}{x}$



Domain:

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Absolute Value Function: y = |x|



Domain:

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Greatest Integer Function: y = **[x]**



Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):

Exponential Function: $y = e^x$



Domain:

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Natural Log Function: y = ln(x)



Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):



Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n): Piecewise Function (Will Vary. This is an example.)



$$y = \begin{cases} x+4, x < -1 \\ x^2, -1 \le x \le 2 \\ 4, x > 2 \end{cases}$$

Sine Function: y = sin(x)



Domain:

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Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots):

y-intercepts (koots). y-intercepts (if any): Continuous (y/n): Periodic (y/n):

Cosine Function: y = cos(x)



Tangent Function: y = tan(x)



Domain:

Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):

Cosecant Function: y = csc(x)



Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any):

Continuous (y/n): Periodic (y/n):

Secant Function: y = **sec**(**x**)



Domain:

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Cotangent Function: y = **cot**(**x**)



Domain: Range: Asymptotes (if any): Symmetry (if any): x-intercepts (Roots): y-intercepts (if any): Continuous (y/n): Periodic (y/n):