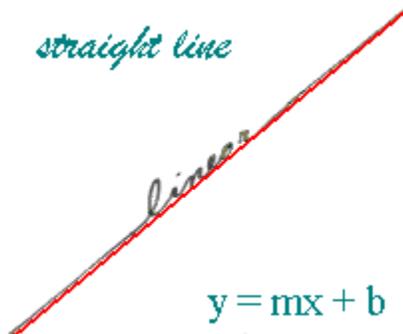


Families of Functions

you need to know

Linear functions

straight line



$$y = mx + b$$

Constant function
(a special kind of linear function)

horizontal line



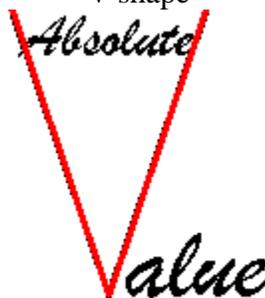
$$y = c$$

Quadratic Functions
Parabolas



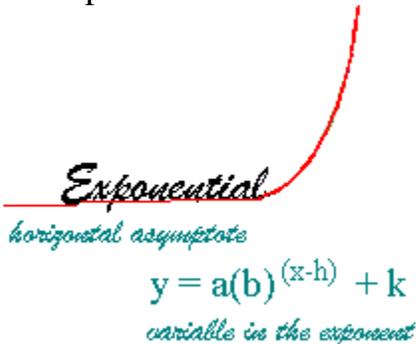
$$y = a(x-h)^2 + k$$

Absolute Value Functions
V shape



$$y = a|x - h| + k$$

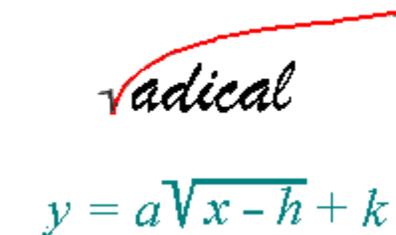
Exponential Functions



$$y = a(b)^{(x-h)} + k$$

variable in the exponent

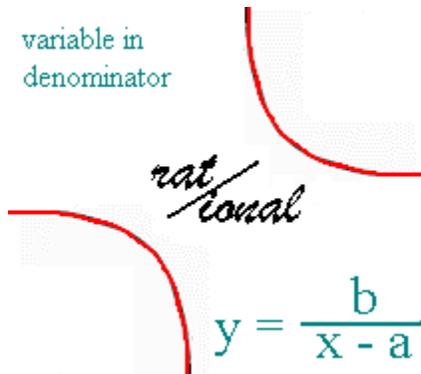
Radical Functions
square root



$$y = a\sqrt{x - h} + k$$

Rational Functions

variable in denominator



$$y = \frac{b}{x - a}$$