

B4 Alg. II 10/3/11 AA

Absolute Value:

$$f(x) = a|x-h| + k$$

$$f(x) = |x| \text{ (Parent Function)}$$

Parent Function of Absolute Value:

$$f(x) = |x|$$



"a" of an absolute value is the slope
positive "a" will go up
negative "a" will go down

if "a" is less than 1 it will open
wider (vertical stretch)

if "a" is greater than 1 it will open
narrower (horizontal stretch)

k changes the vertical position
of the graph

h changes the horizontal
position of the graph

-h = positive (move to the right)

+h = negative (shift to the left)

$$* f(x) = a|x-h|+k *$$

↑ ↑
x y
└───┘
(x,y)

↖ determine
the vertex
of the
* absolute
value
(vertex form
of an absolute
value)

Domain and Range of an
Absolute value (Parent Function)

Domain: All Real #s

Range: All Real #s ≥ 0



~~continuous~~ continuous
Function



discret
Function