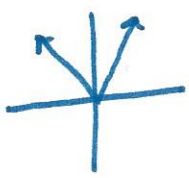
Absolute Value Equations



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

a = "slope"

(h,k) = Vertex

* Opposite h

a is +: Open up

a is −: Open down

$|a| > 1$: ~~wider~~ steeper

$|a| < 1$: Wider

$y = |x-2| + 3$

$a = 1$

V: $(2,3)$

$y = -2|x+4|$

$a = -2$

V: $(-4,0)$

$y + 2 = |x+1|$

$-2 \qquad -2$

$y = |x+1| - 2$

$a = 1$

V: $(-1,-2)$