

HOMWORK:



GRAPH ABSOLUTE VALUE FUNCTIONS

NAME: _____

DAY 1

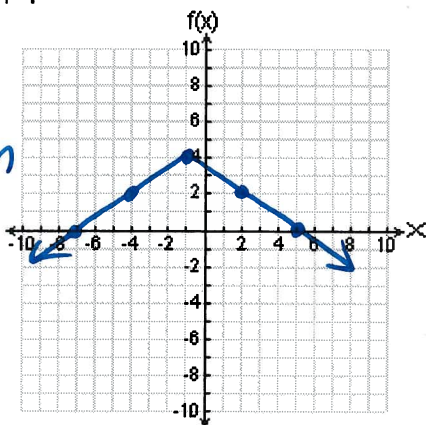
WITHOUT a calculator, sketch the following, your three KEY points should be clear:

1) $f(x) = -\frac{2}{3}|x+1|+4$

$(-1, 4)$

Opens Down

Slope = $\pm \frac{2}{3}$

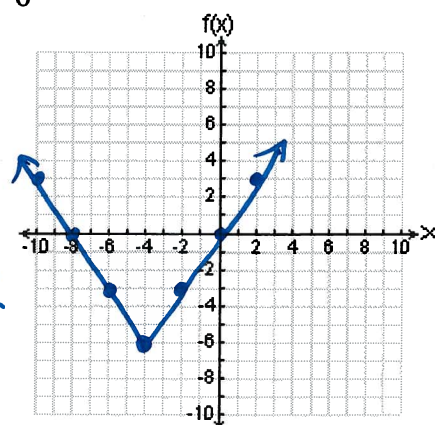


2) $f(x) = \frac{3}{2}|x+4|-6$

$(-4, -6)$

Opens up

Slope = $\pm \frac{3}{2}$



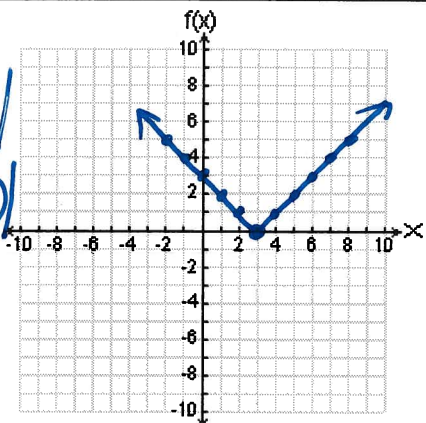
3) $f(x) = |3-x|$

$f(x) = |-x+3|$

$f(x) = |-(x-3)|$

$f(x) = |x-3|$

Slope = ± 1



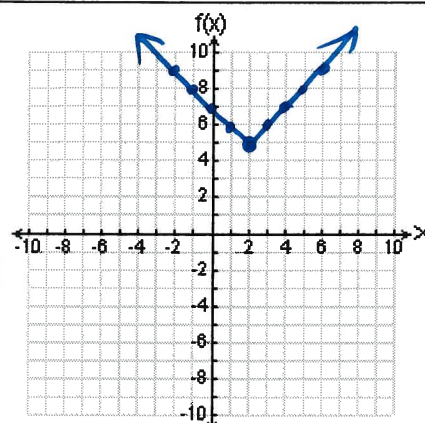
*Hint: Rewrite: $|3-x| = |-(x+3)|$

4) $f(x) = |x-2|+5$

$(2, 5)$

Opens up

Slope = ± 1

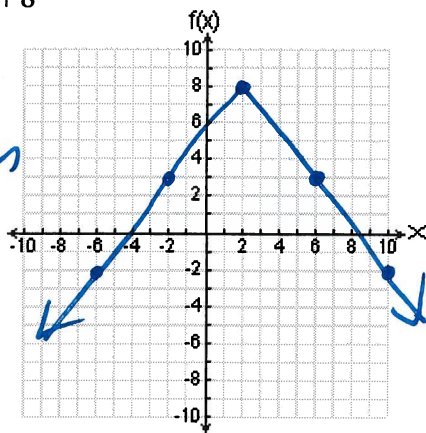


5) $f(x) = -\frac{5}{4}|x-2|+8$

$(2, 8)$

Opens Down

Slope = $\pm \frac{5}{4}$

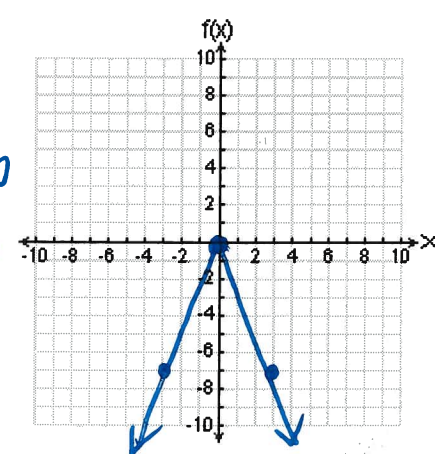


6) $f(x) = -\frac{7}{3}|x|$

$(0, 0)$

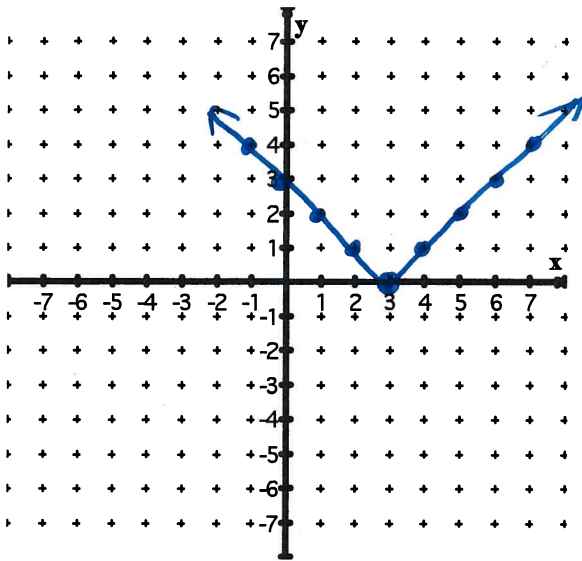
Opens Down

Slope = $\pm \frac{7}{3}$

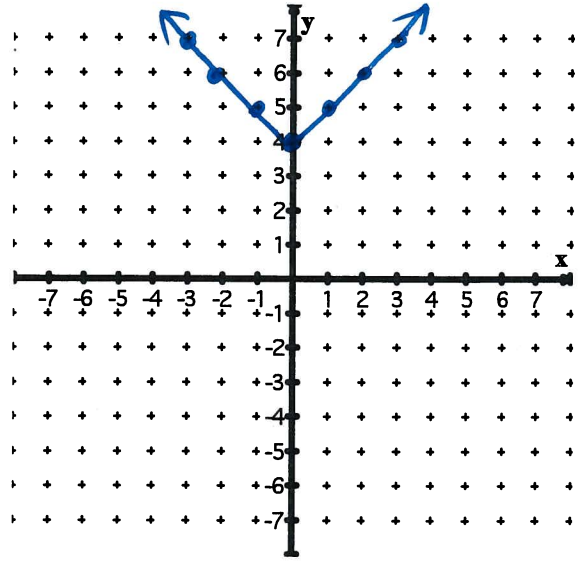


Graph the absolute value functions:

1. $y = |x - 3|$ (3, 0)

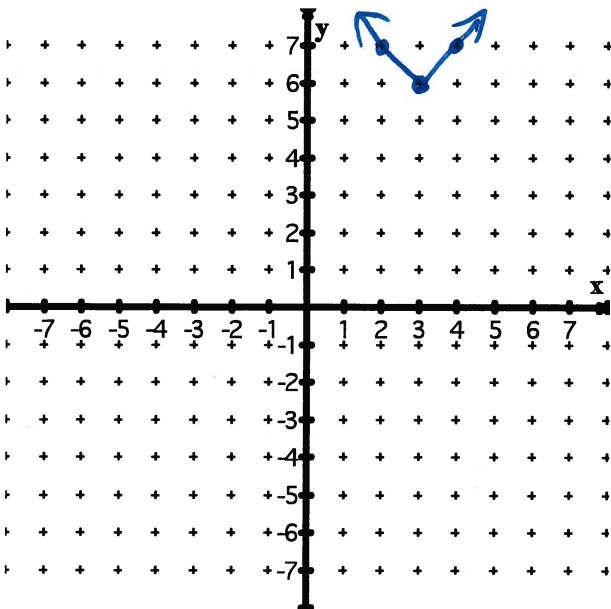


2. $y = |x| + 4$ (0, 4)

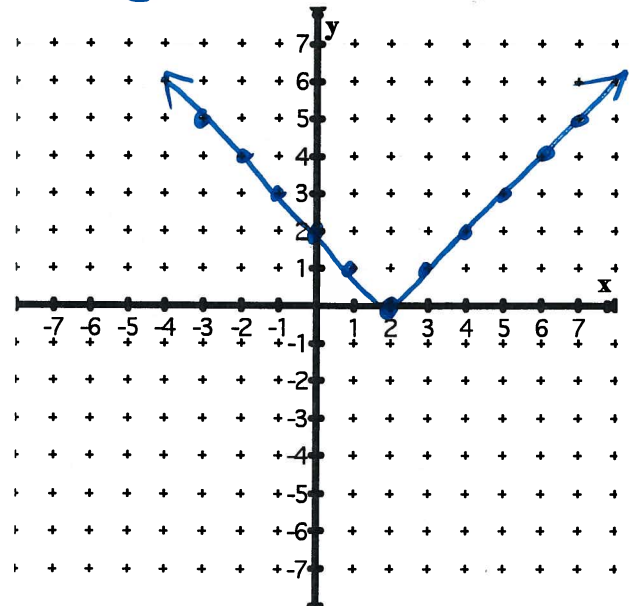


Graph the absolute value functions.

1. $f(x) = |x - 3| + 6$ (3, 6)



2. $g(x) = |-x + 2|$
 $g(x) = |-(x - 2)|$



$g(x) = |x - 2|$
(2, 0)