

GRAPHING ABSOLUTE VALUE EQUATIONS

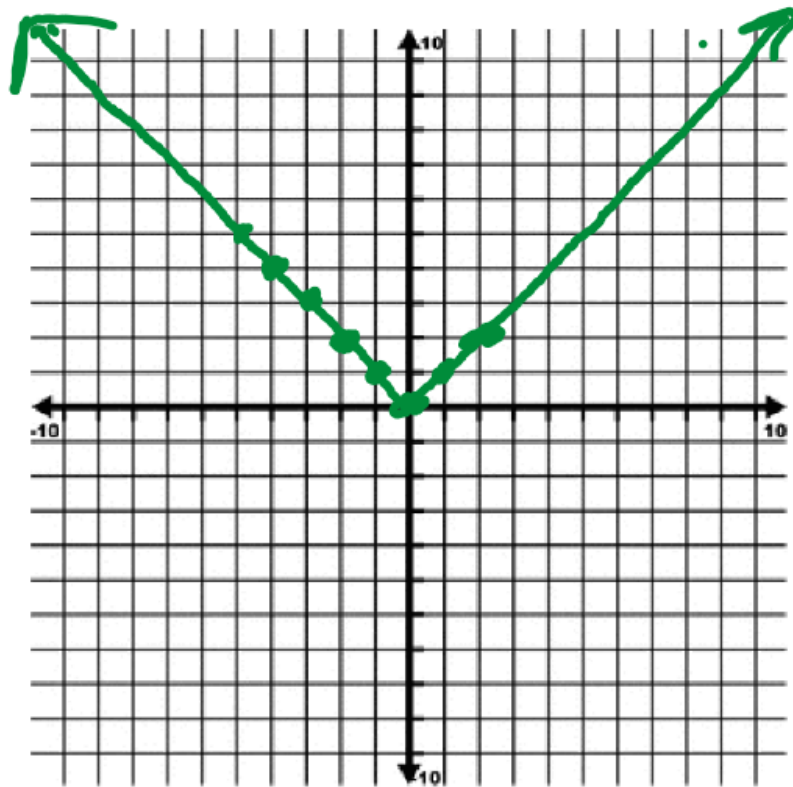
The graph of an absolute value equation is

in the shape
of a 'V'

Graph $y = |x|$.

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

x	y
-2	2
-1	1
0	0
1	1
2	2

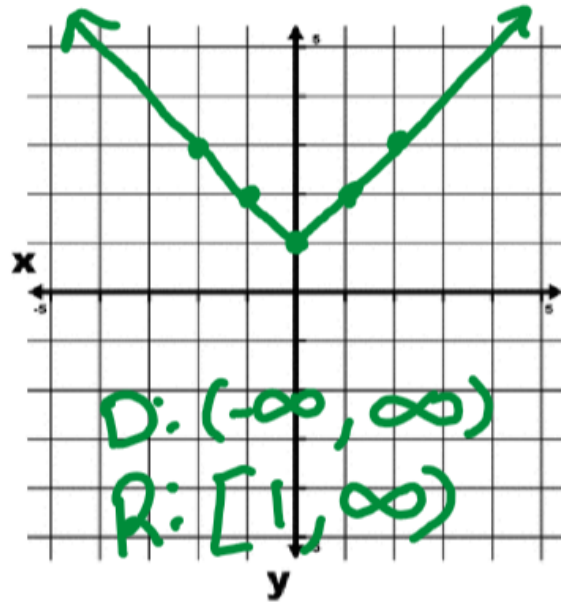


$$y = (|x|+1)$$

$$a=1 \quad h=0 \quad k=1$$

x	y+1
-2	3
-1	2
0	1
1	2
2	3

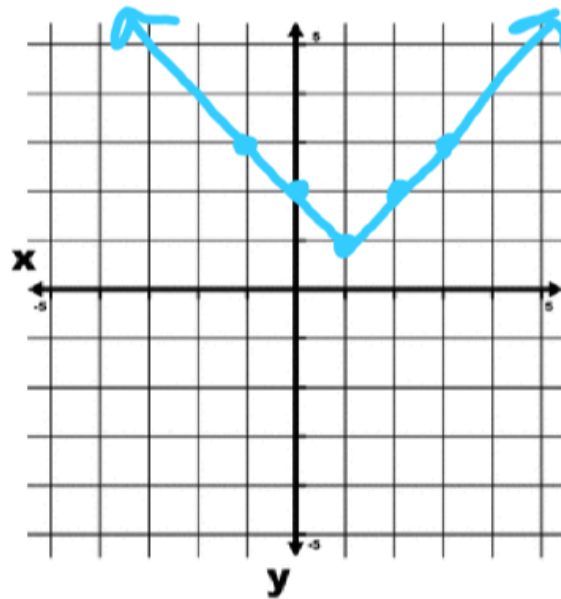
x	y
-2	1
-1	0
0	-1
1	0
2	1



$$y = |x-1|+1$$

$$a=1 \quad h=1 \quad k=1$$

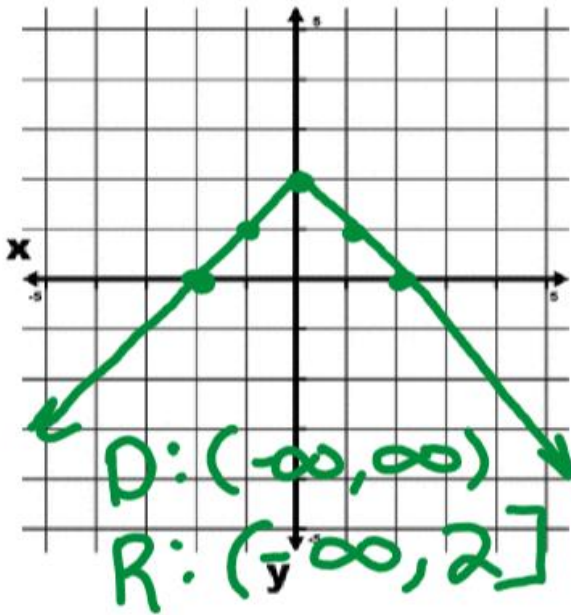
x+1	y+1
-2	3
-1	2
0	1
1	2
2	3



$$y = -|x| + 2$$

$$a = -1 \quad h = 0 \quad k = 2$$

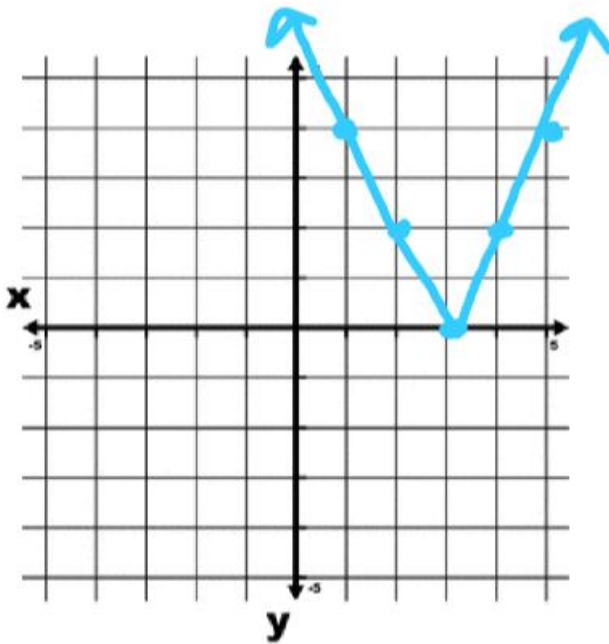
x	$-y + 2$
-2	0
-1	1
0	2
1	1
2	0



$$y = 2|x - 3|$$

$$a = 2 \quad h = 3 \quad k = 0$$

$x - 3$	$2y$
1	4
2	8
3	12
4	16

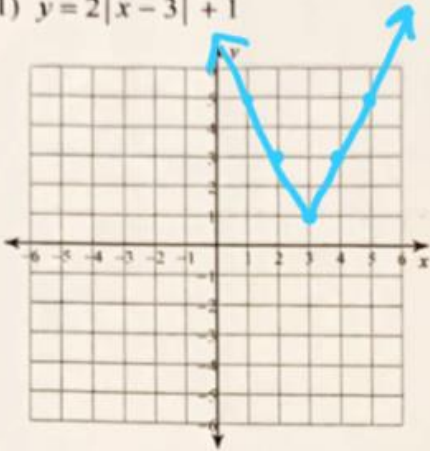


Graphing Absolute Value Functions - CW

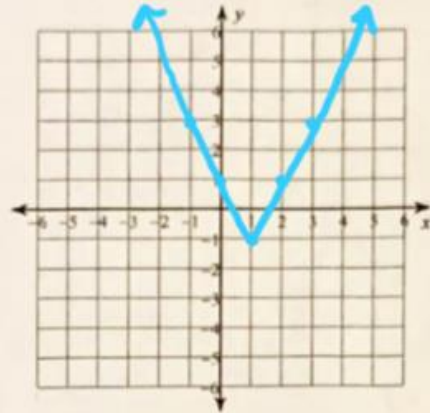
Date _____ Period _____

Graph each equation.

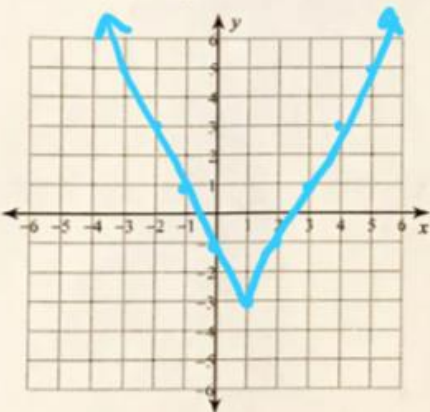
1) $y = 2|x - 3| + 1$



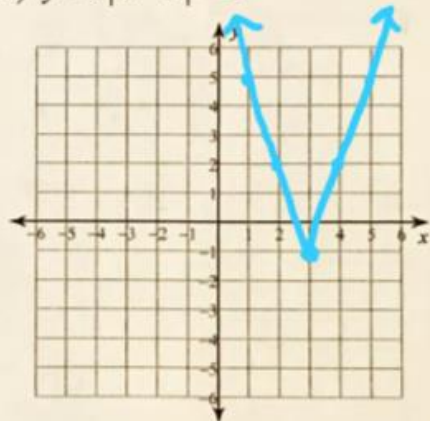
2) $y = 2|x - 1| - 1$



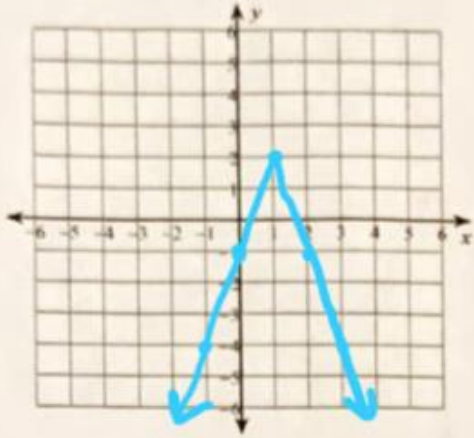
3) $y = 2|x - 1| - 3$



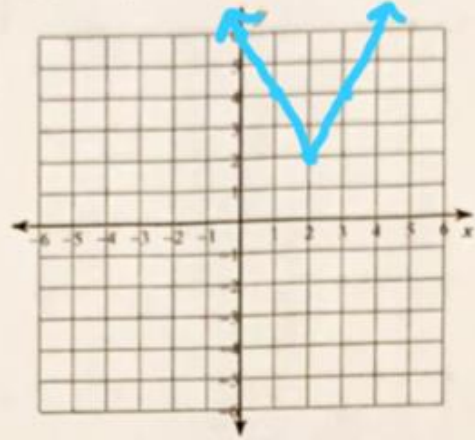
4) $y = 3|x - 3| - 1$



5) $y = -3|x - 1| + 2$



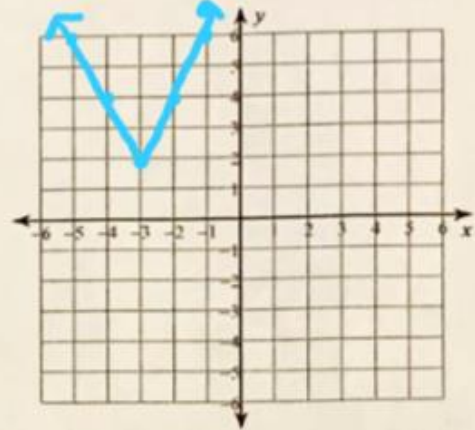
6) $y = 2|x - 2| + 2$



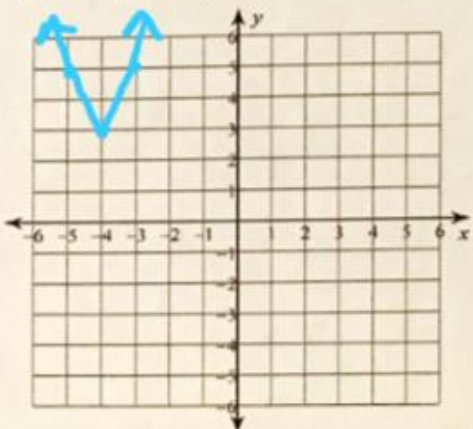
7) $y = 2|x - 1| + 1$



8) $y = 2|x + 3| + 2$



9) $y = 2|x + 4| + 3$



10) $y = -3|x - 1| - 4$

