"Review 55"

④

x	$y = \lvert x \rvert - 3$	
-3	$\lvert -3 \rvert - 3 = 3 - 3 = 0$	(-3, 0)
-2	$\lvert -2 \rvert - 3 = -1$	(-2, -1)
-1	$\lvert -1 \rvert - 3 = -2$	(-1, -2)
0	$\lvert 0 \rvert - 3 = -3$	(0, -3)
1	$\lvert 1 \rvert - 3 = -2$	(2, -1)
2	$\lvert 2 \rvert - 3 = 2 - 3 = -1$	(3, 0)
3	$\lvert 3 \rvert - 3 = 3 - 3 = 0$	

⑤ $y = x^2 - 4$

$(-3)^2 = -3 \times -3 = 9$

$-3^2 = -9$

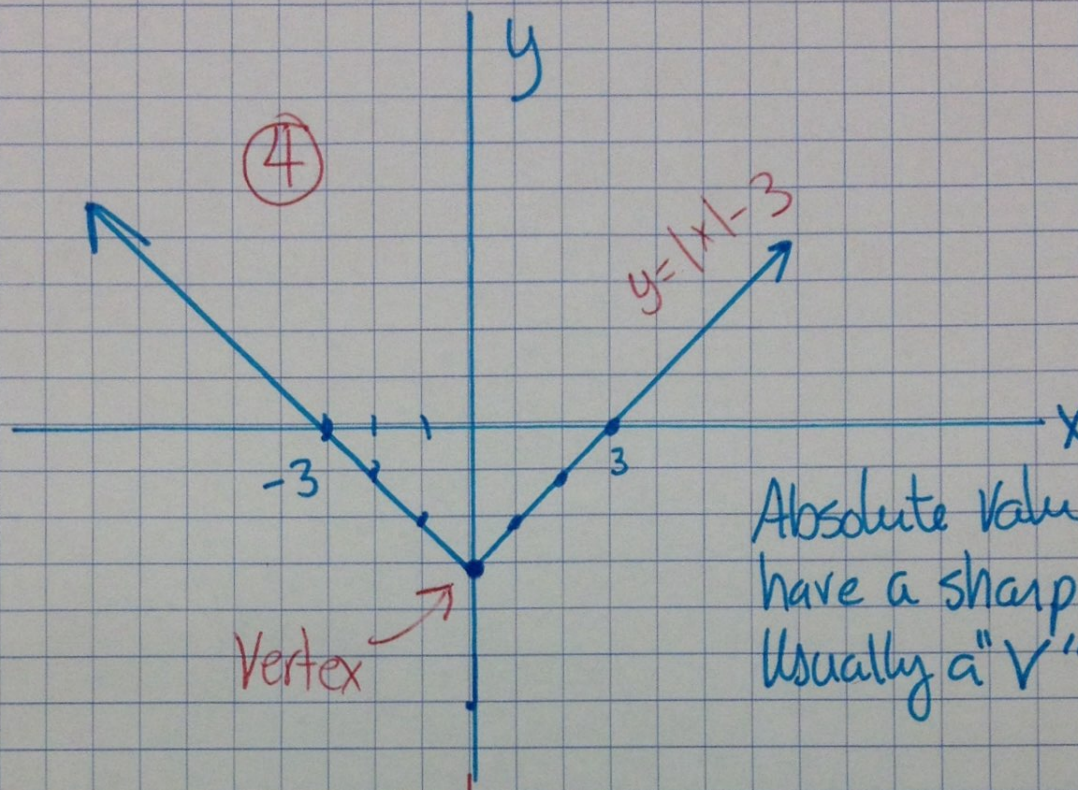
x	$y = x^2 - 4$	
-3	$(-3)^2 - 4 = 9 - 4 = 5$	(-3, 5)
-2	$(-2)^2 - 4 = 4 - 4 = 0$	(-2, 0)
-1	$(-1)^2 - 4 = 1 - 4 = -3$	(-1, -3)
0	$0^2 - 4 = 0 - 4 = -4$	(0, -4)
1	$(1)^2 - 4 = -3$	(1, -3)
2	$(2)^2 - 4 = 0$	(2, 0)
3	$(3)^2 - 4 = 5$	(3, 5)

(7) Do #7

$y = -|x| + 3$

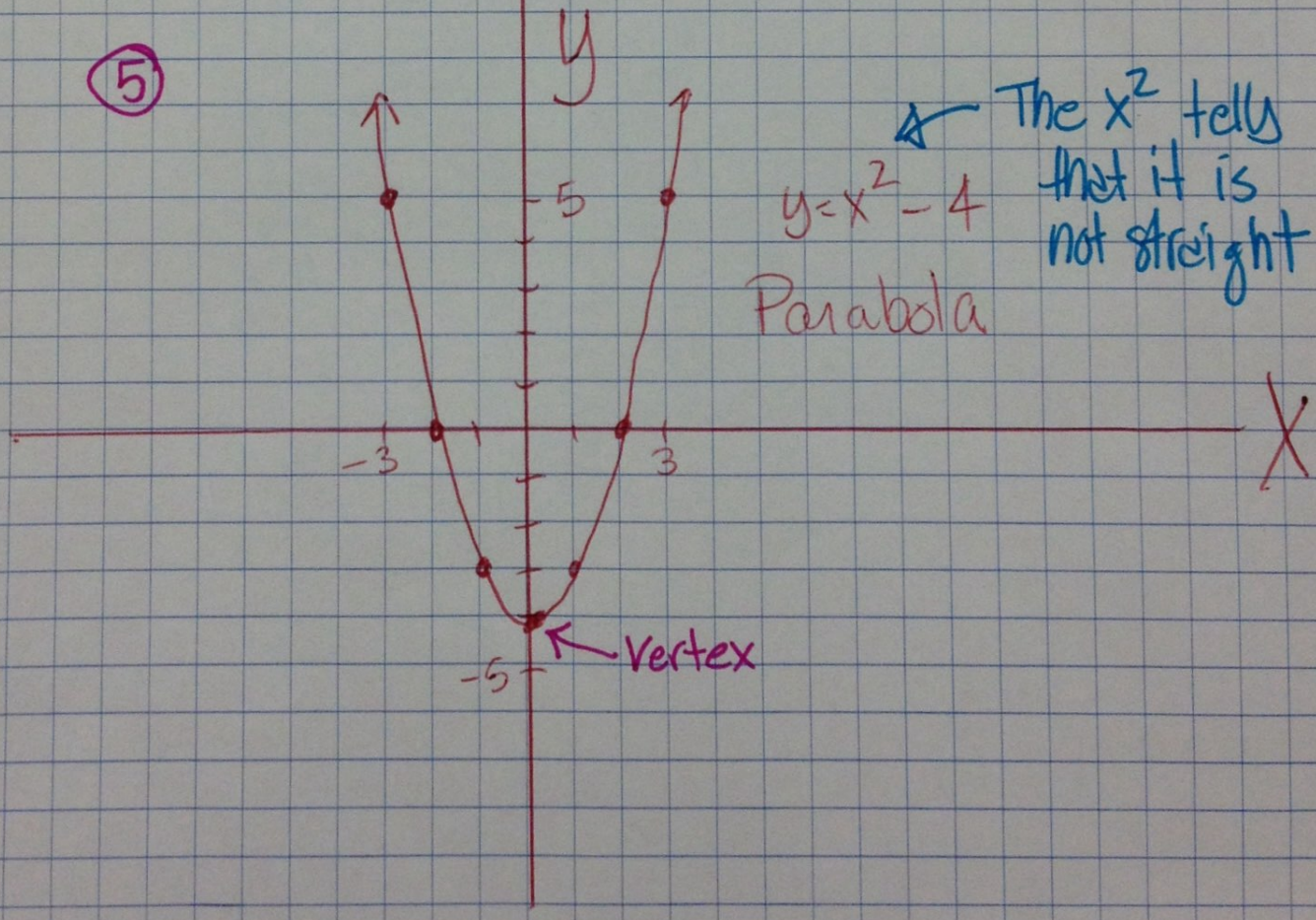
X	$y = -\lvert x\rvert + 3$	y-value	Plot these points
-3	$-\lvert -3\rvert + 3 = -3 + 3 = 0$	0	(-3, 0)
-2	$-\lvert -2\rvert + 3 = -2 + 3 = 1$	1	(-2, 1)
-1	$-\lvert -1\rvert + 3 = -1 + 3 = 2$	2	(-1, 2)
0	$-\lvert 0\rvert + 3 = 0 + 3 = 3$	3	(0, 3)
1	$-\lvert 1\rvert + 3 = -1 + 3 = 2$	2	(1, 2)
2	$-\lvert 2\rvert + 3 = -2 + 3 = 1$	1	(2, 1)
3	$-\lvert 3\rvert + 3 = -3 + 3 = 0$	0	(3, 0)

④



Absolute values have a sharp corner. Usually a "V" shape.

⑤

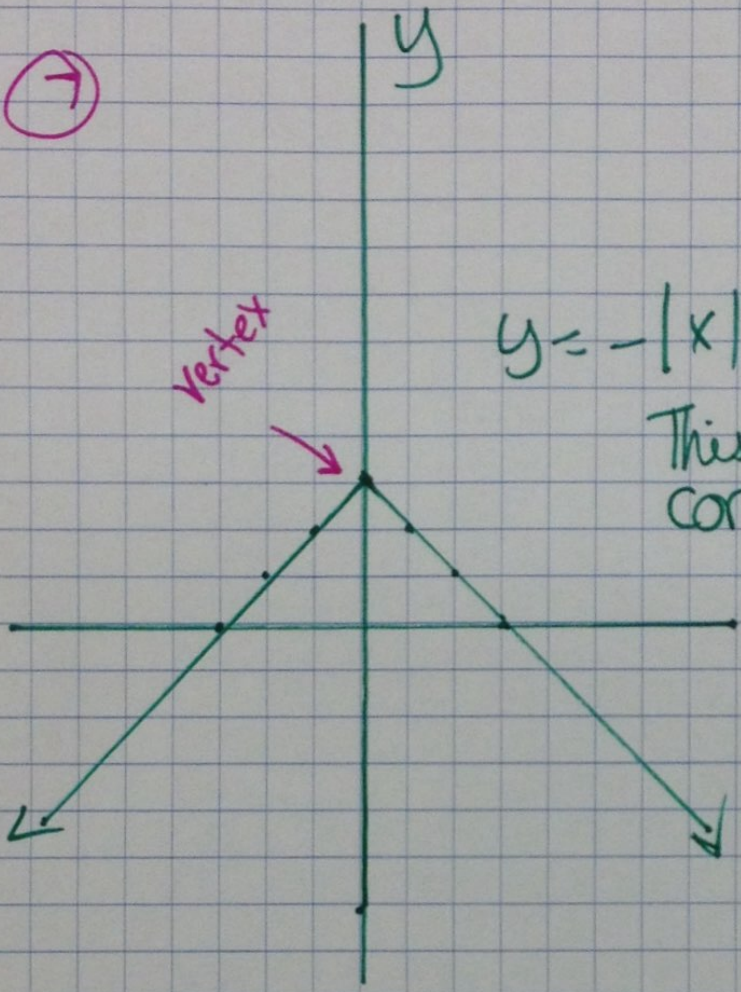


$y = x^2 - 4$

Parabola

The x^2 tells that it is not straight

7



$y = -|x| + 3$

This has a sharp corner because it's an absolute value.

The line shows the infinite # of points that satisfy this equation.