

1-14-14

3<sup>rd</sup> Trig

Look at graphs of

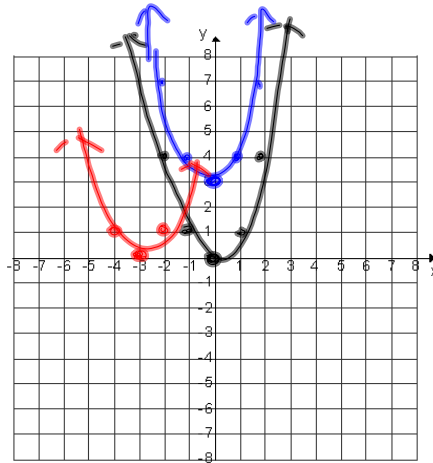
①  $y = x^2 \rightarrow$  parabolas

②  $y = |x| \rightarrow$  absolute value

③  $y = \sqrt{x} \rightarrow$  square root

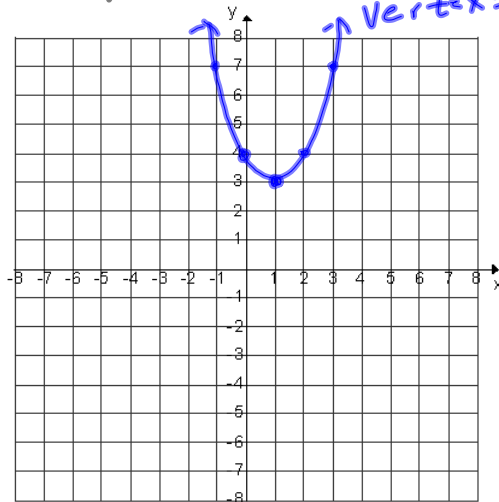
$y = x^2$

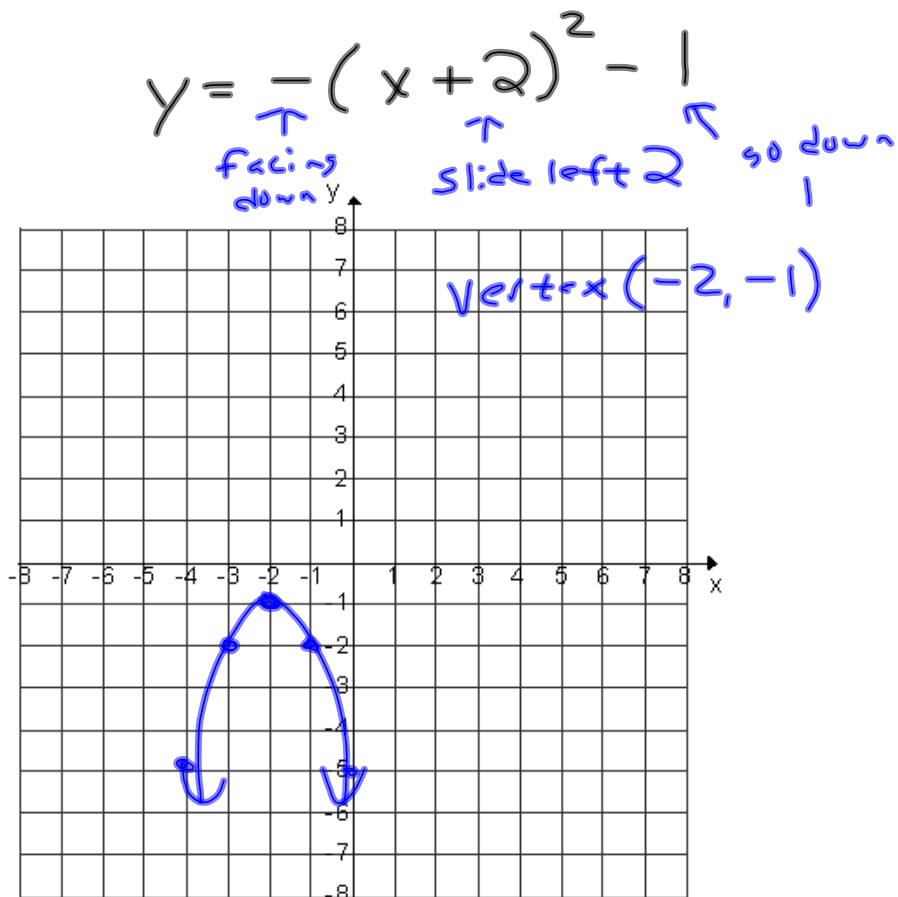
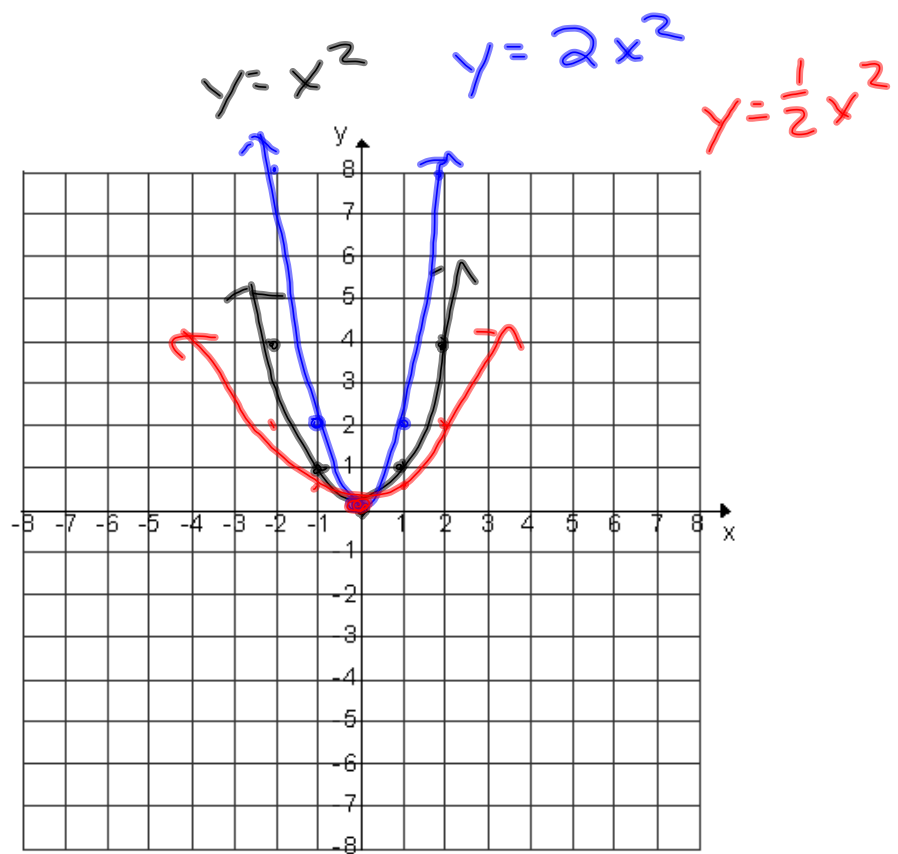
x	y
0	0
1	1
-1	1
2	4
-2	4



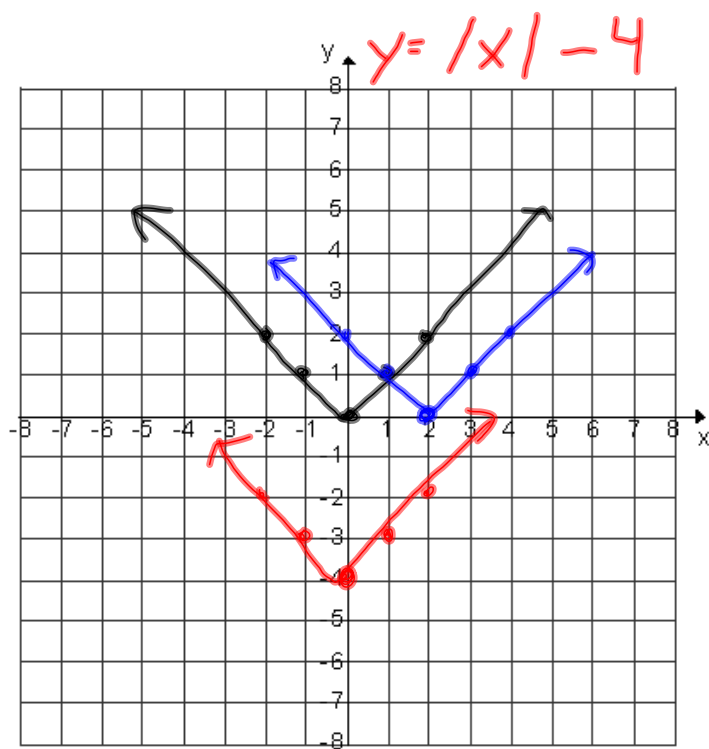
$y = x^2 + 3$   
 $y = (x+3)^2$

$y = (x-1)^2 + 3$

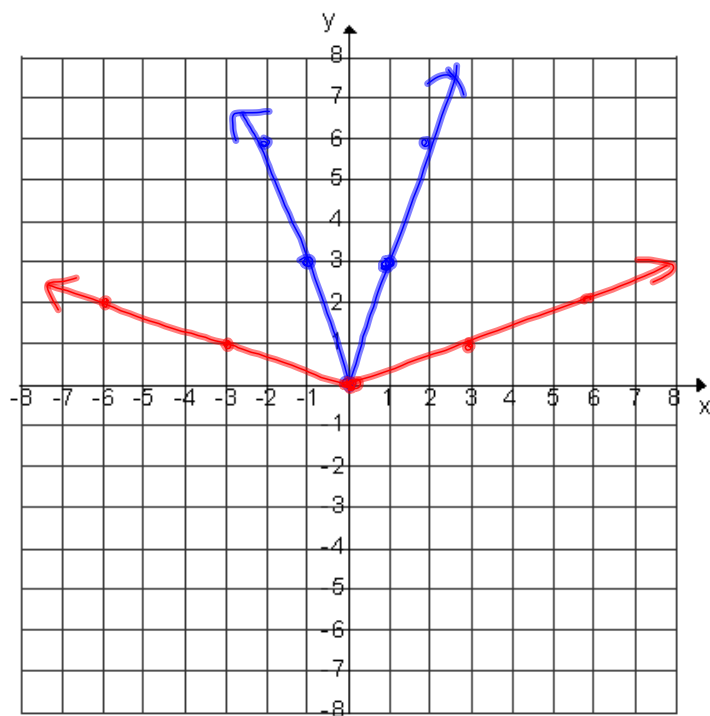




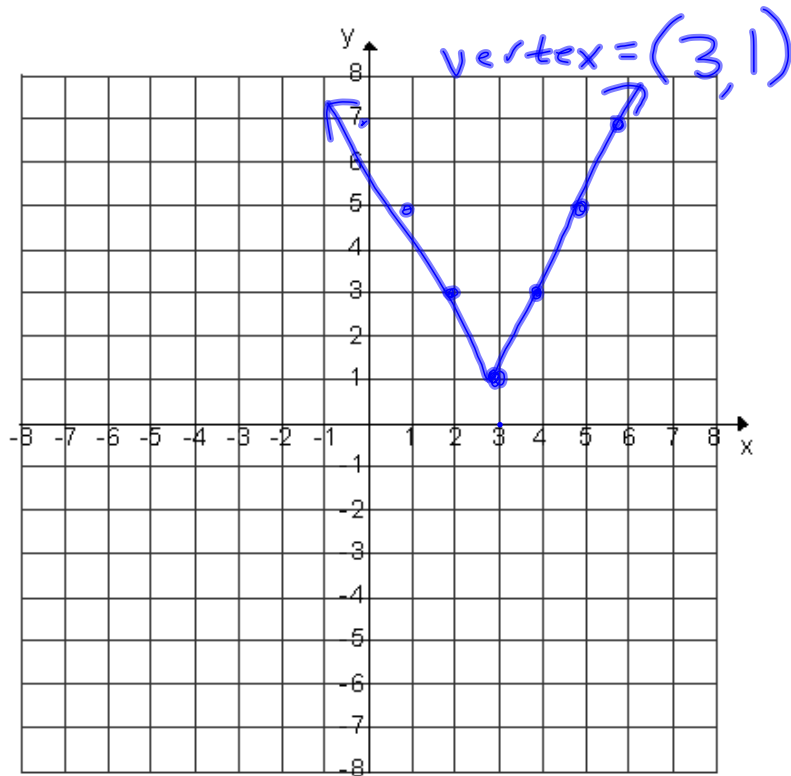
$$y = |x| \quad y = |x-2|$$



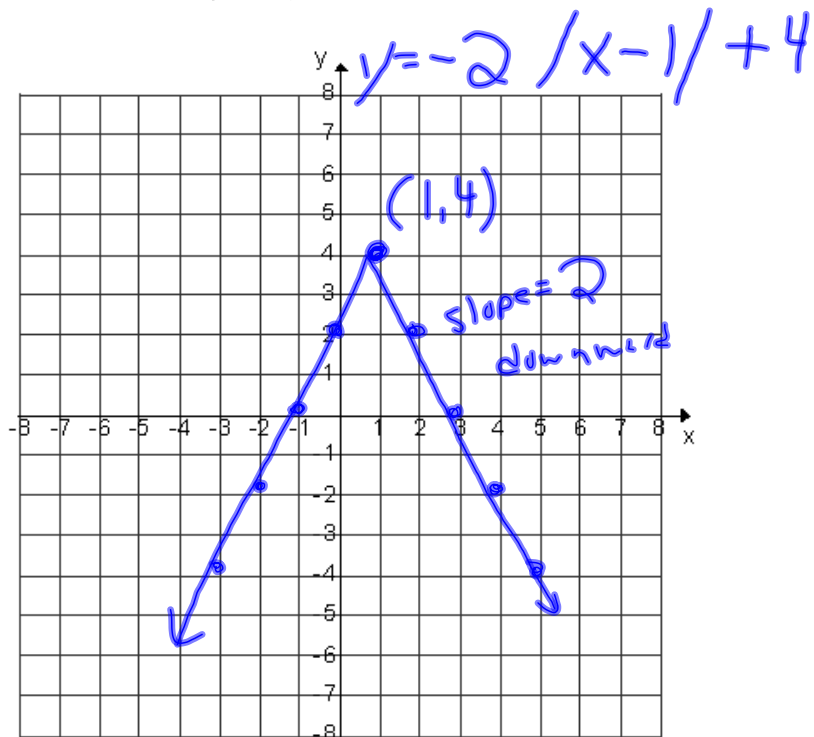
$$y = 3|x| \quad y = \frac{1}{3}|x|$$



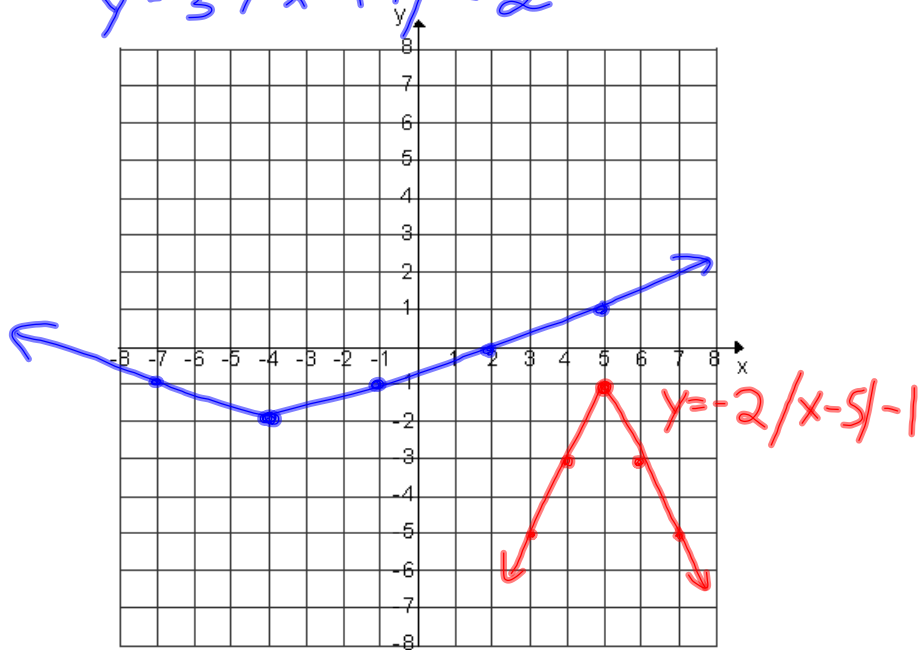
$$y = 2|x-3| + 1$$



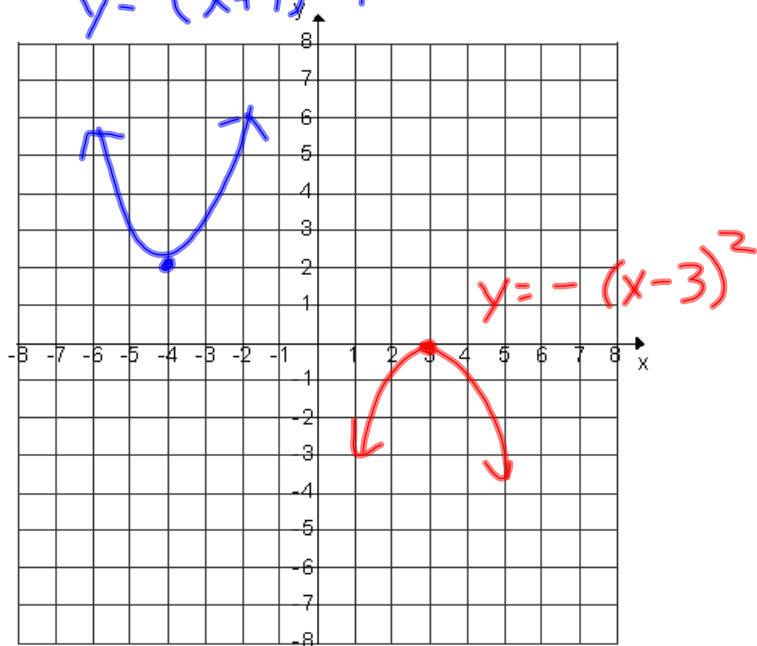
What is graphed below?



$$y = \frac{1}{3} |x + 4| - 2$$



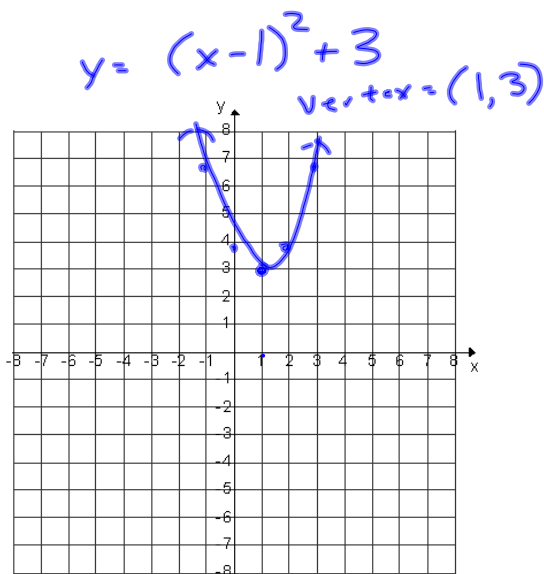
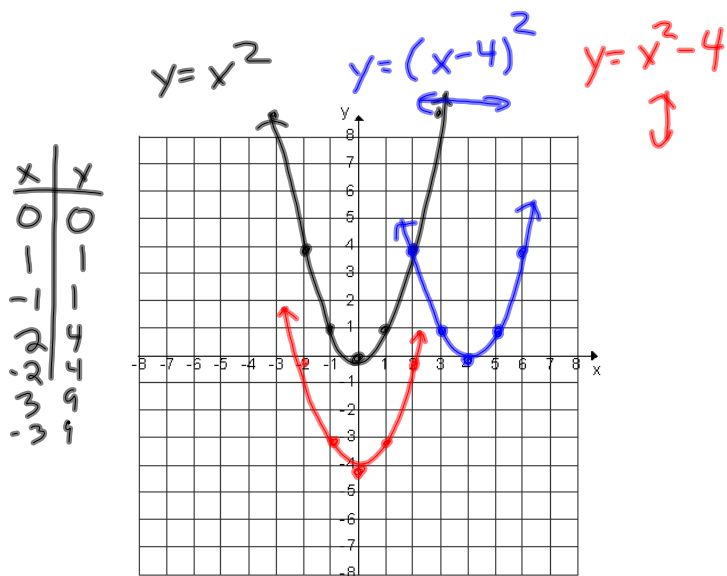
$$y = (x + 4)^2 + 2$$



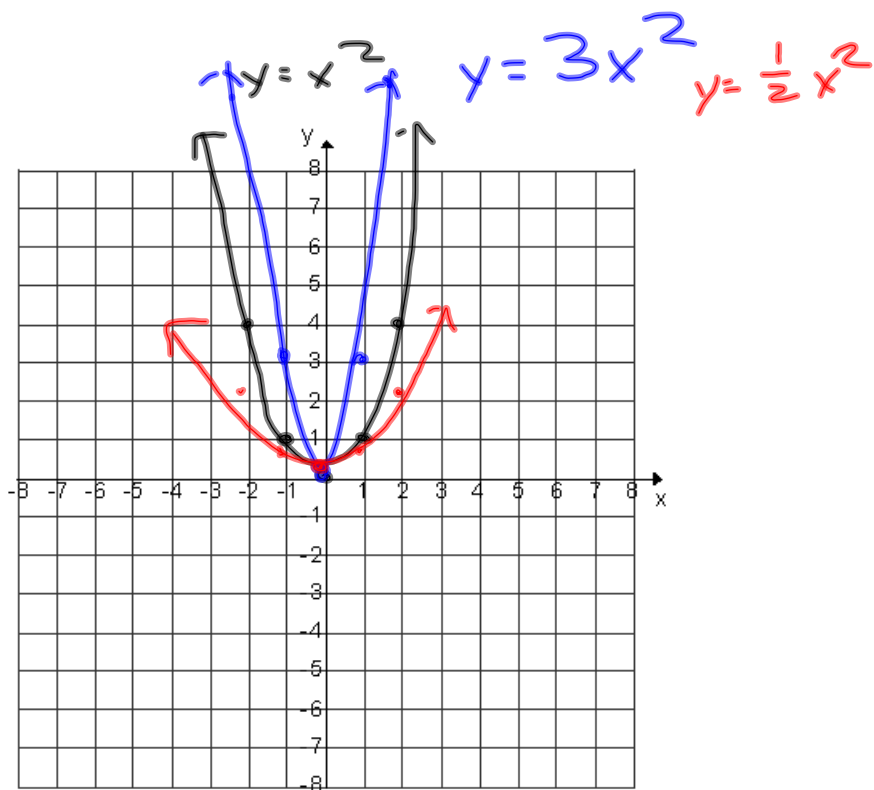
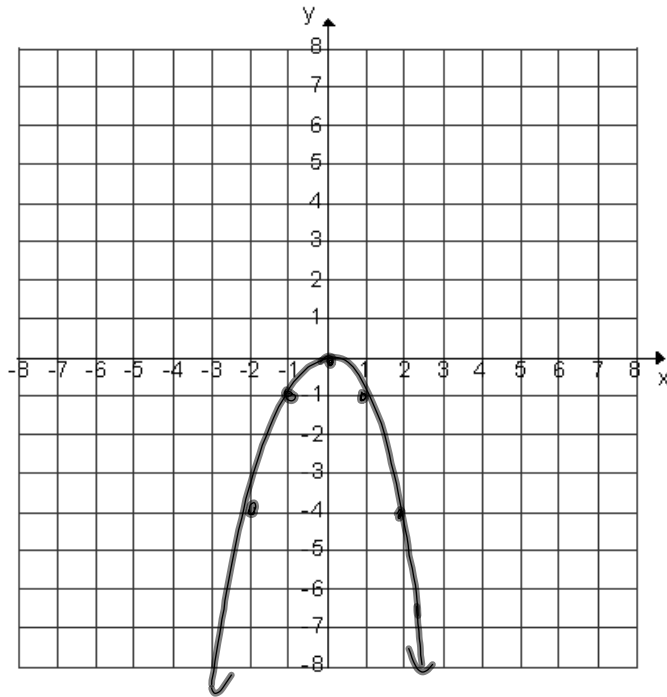
1-14-14  
4<sup>th</sup> Trig

Parent graphs

- ①  $y = x^2 \rightarrow$  parabola
- ②  $y = |x| \rightarrow$  absolute value
- ③  $y = \sqrt{x} \rightarrow$  square root



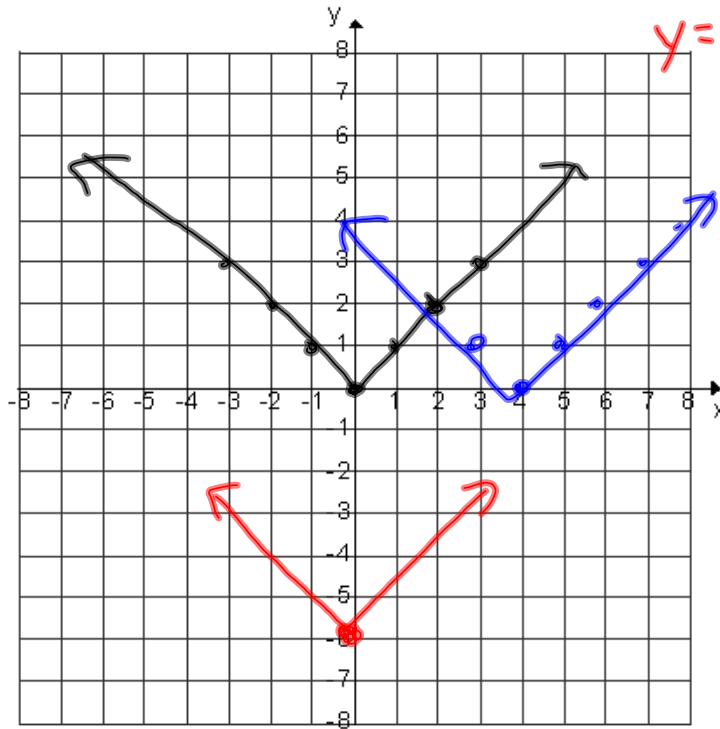
$$y = -x^2$$



$$y = |x|$$

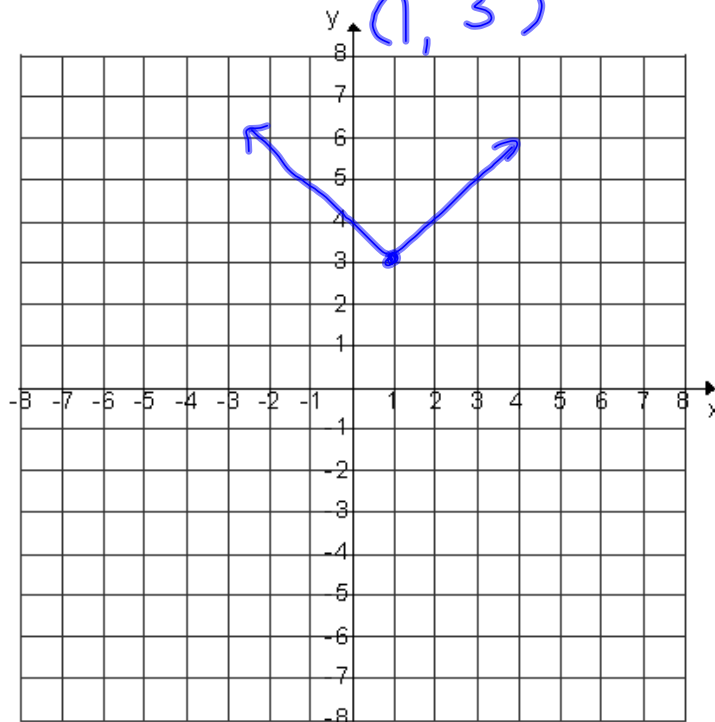
$$y = |x-4|$$

$$y = |x|-6$$



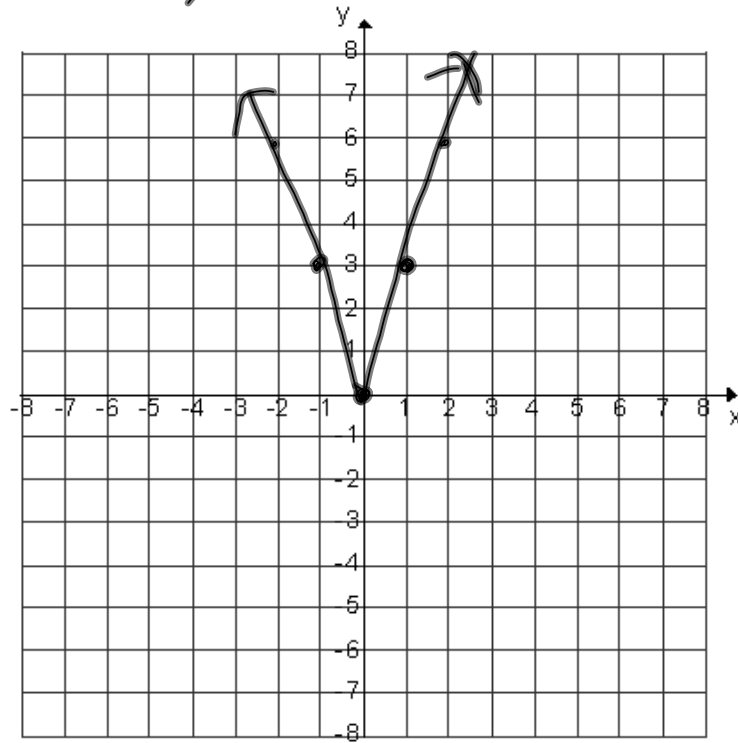
$$y = |x-1| + 3$$

(1, 3)





$$y = 3|x|$$



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

vert =  $x = (1, -3)$

