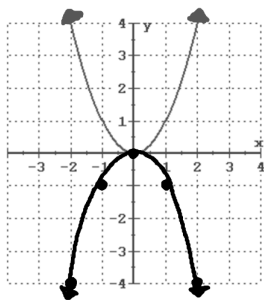


Warm-Up: September 29, 2014

Graph the following functions and describe what happens to the graph.

1. $y = -x^2$

x	f(x)
-3	-9
-2	-4
-1	-1
0	0
1	-1
2	-4
3	-9



How did the graph move?

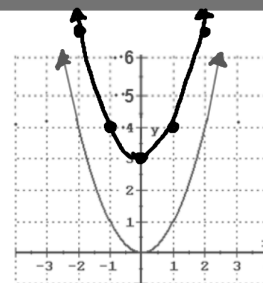
It reflected over x-axis

What in the equation could help you identify this w/o graphing?

The (-) a makes it open Down.

2. $y = x^2 + 3$

x	f(x)
-3	12
-2	7
-1	4
0	3
1	4
2	7
3	12



What direction did it move?

UP

How much did it move?

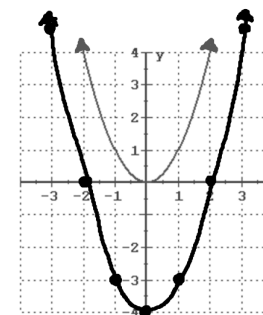
up 3

What in the equation could help you identify this w/o graphing?

+ 3 as a constant = up 3

3. $y = x^2 - 4$

x	f(x)
-3	5
-2	0
-1	-3
0	-4
1	-3
2	0
3	5



What direction did it move?

Down

How much did it move?

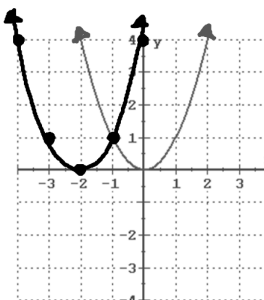
Down 4

What in the equation could help you identify this w/o graphing?

-4 as a constant = Down 4

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

x	f(x)
-3	1
-2	0
-1	1
0	4
1	9
2	16
3	25



What direction did it move?

Left

How much did it move?

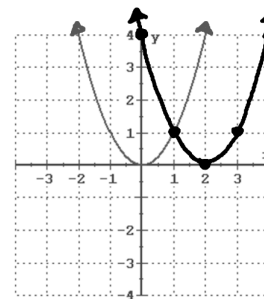
Left 2

What in the equation could help you identify this w/o graphing?

+2 in () = left 2 (opp of what I expected)

5. $y = (x - 2)^2$

x	f(x)
-3	25
-2	16
-1	9
0	4
1	1
2	0
3	1
4	4
5	9



What direction did it move?

Right

How much did it move?

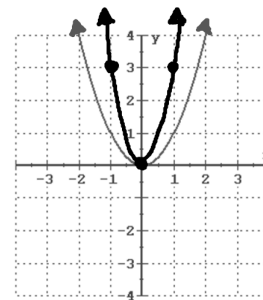
Right 2

What in the equation could help you identify this w/o graphing?

-2 in () = right 2 (opp of what I expected)

6. $y = 3x^2$

x	f(x)
-3	27
-2	12
-1	3
0	0
1	3
2	12
3	27



What happened to the graph?

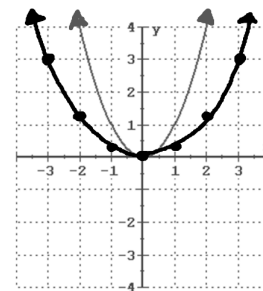
It got skinnier

What in the equation could help you identify this w/o graphing?

a is bigger than 1

7. $y = (1/3)x^2$

x	f(x)
-3	3
-2	1.33
-1	0.33
0	0
1	0.33
2	1.33
3	3



What happened to the graph?

It got wider

What in the equation could help you identify this w/o graphing?

a is less than 1. It

is a fraction.

* fraction fat *