

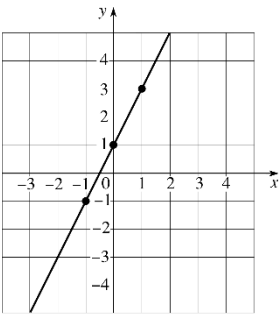
4.4 Comparing Functions

Name: _____

Math II

Hour: _____

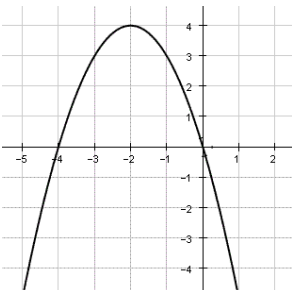
Order the functions below from the lowest rate of change (1) to the highest rate of change (4).



The output of a function is equal $y = 5x + 1$
To the input divided by two.

x	y
-2	-2
-1	2
0	6
1	10
2	14

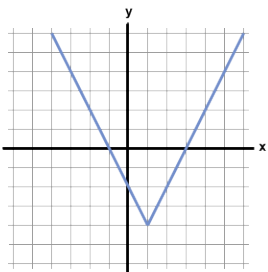
Order the functions below from the lowest maximum(1) to the highest maximum(4).



The output of a function is equal to $y = -x^2 + 1$
the opposite of the input squared.

x	-6	-5	-4	-3	-2	-1	0
f(x)	-1	4	7	8	7	4	-1
	(-6,-1)	(-5,4)	(-4,7)	(-3,8)	(-2,7)	(-1,4)	(0,-1)

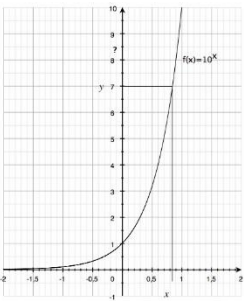
Order the functions below from the lowest minimum(1) to the highest minimum(4).



The output of a function is equal $y = |x| + 2$
To one less than the absolute
value of the input

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

Order the functions below from the one that increases the slowest (1) to the one that increases the fastest (4) as x approaches infinity.

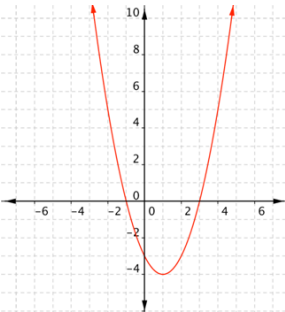


The output of a function is equal to
4 raised to the input of the function.

$y = 7^x$

x	y
1	2
2	4
3	8
4	16
5	32

List the x-intercept(s) of the functions below:

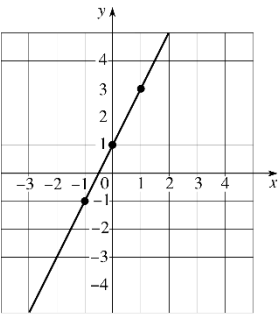


The output of a function is
Equal to two less than the
input squared

$$y = x^2 - 5$$

x	y
-3	6
-2	0
-1	-4
0	-6
1	-6
2	-4
3	0
4	6

List the y-intercepts of the functions below:

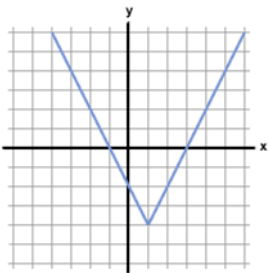


The output of a function is equal
To the input divided by two.

$$y = 5x + 1$$

x	y
-2	-2
-1	2
0	6
1	10
2	14

List the end behavior of the functions below:



The output of a function is equal
To one less than the absolute
value of the input

$$y = |x| + 2$$

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

Below, draw a graph, write a verbal description, write an equation, and create a table for a function of your choosing.