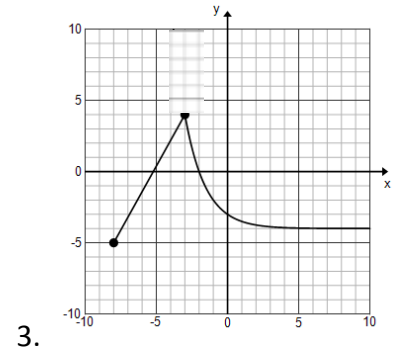
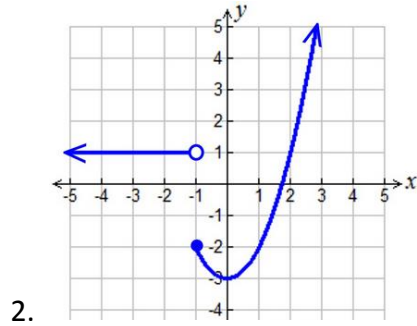
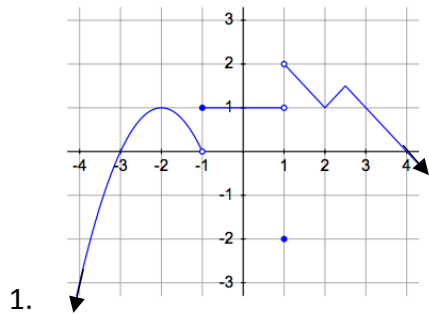


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

### Features of Functions #4 Assignment

State the end behavior of the following functions. Remember that each function will have two end behavior statements.



4. Give the x and y intercepts for the function in #1.

5. Give the x and y intercepts for the function in #2.

6. Give the x and y intercepts for the function in #3.



7.

Domain:

Range:

Max:

Min:

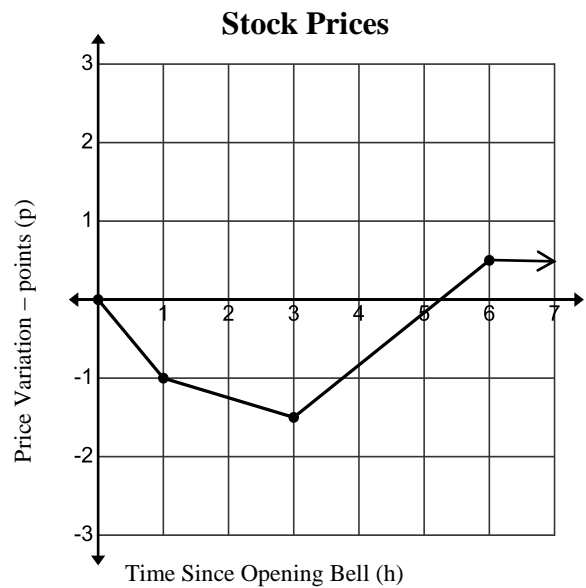
Increasing:

Decreasing:

End Behavior:

X-intercept(s):

y-intercept(s):



The following represents a continuous function defined on the interval from  $[0, 6]$ .

$x$	$f(x)$
0	2
1	-3
2	0
3	2
4	6
5	12
6	20

8. Determine the domain, range, x and y intercepts.
9. Based on the table, identify the minimum value and where it is located

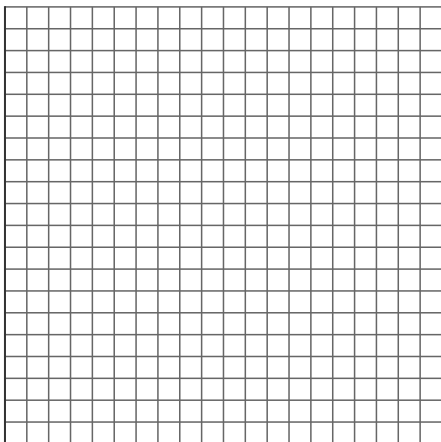
The following represents a discrete function defined on the interval from  $[1,5]$ .

$x$	$f(x)$
1	4
2	10
3	5
4	8
5	3

10. Determine the domain, range, x and y intercepts.
11. Based on the table, identify the minimum value and where it is located.

For each equation, sketch a graph and show key features of the graph.

12.  $f(x) = -2x + 4$ , when  $x \geq 0$ .  
Give the maximum and the minimum



13.  $g(x) = 3^x$  Give the domain and range.  
When is  $g(x)$  increasing and decreasing?

