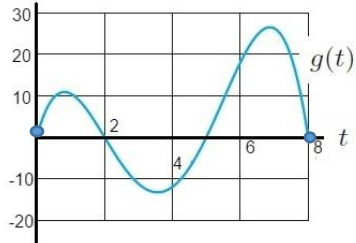


## 8.6 Positive/Negative Intervals

NAME: \_\_\_\_\_ HOUR: \_\_\_\_\_

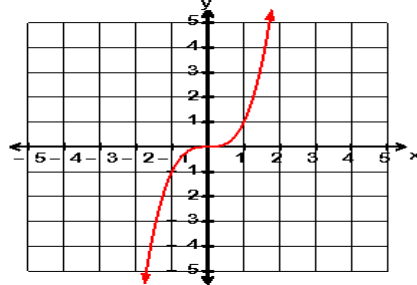
**DIRECTIONS:** Identify the intervals the following graphs are positive and negative. Find the x and y intercepts.

1.



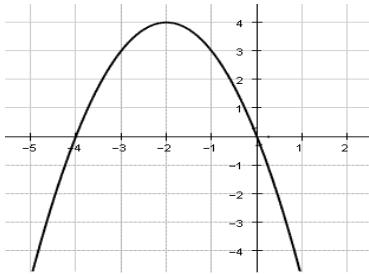
- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

2.



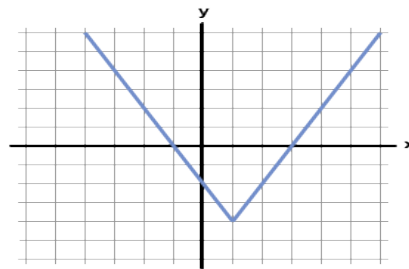
- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

3.



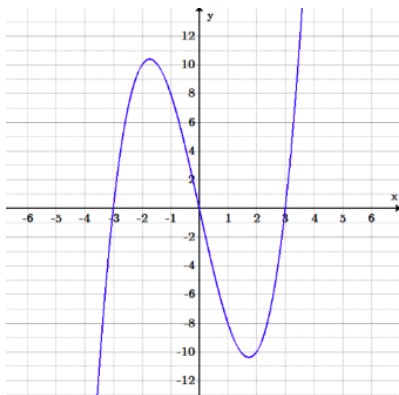
- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

4.



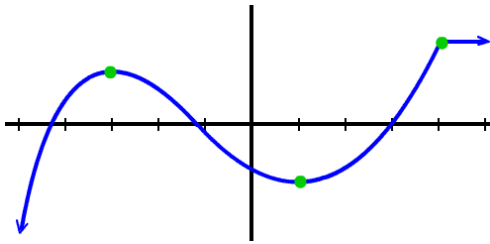
- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

5.



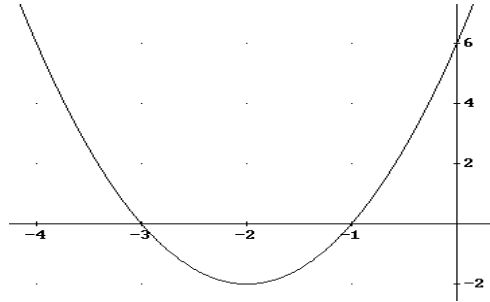
- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

6.



- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

7.

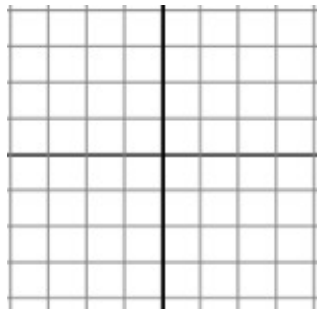


- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

Sketch the following equations using your knowledge of transformations. Find the intervals where the function is positive and negative. Find the x and y intercepts.

8.

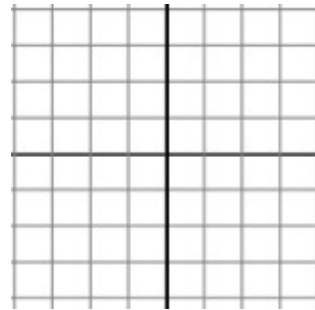
$$f(x) = \sqrt{x - 2}$$



- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

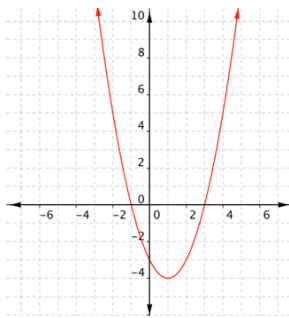
9.

$$f(x) = -(x + 3)^2$$



- Positive \_\_\_\_\_
- Negative \_\_\_\_\_
- x-int \_\_\_\_\_
- y-int \_\_\_\_\_

10. List the x-intercept(s) of the functions below. Sketch a graph if needed.



$$f(x) = x^2 - 4$$

$$y = (x + 5)^2$$

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

x-int(s): \_\_\_\_\_ x-int(s): \_\_\_\_\_ x-int(s): \_\_\_\_\_ x-int(s): \_\_\_\_\_