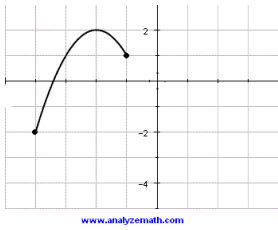


8.5 Increasing/Decreasing Intervals; Relative Max/Min

NAME: _____ HOUR: _____

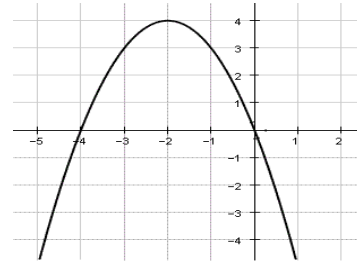
DIRECTIONS: Identify the intervals the following graphs are positive, negative, and constant. Locate any relative max or mins.

1.



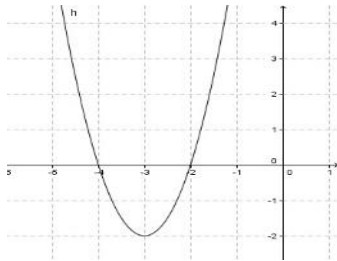
- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

2.



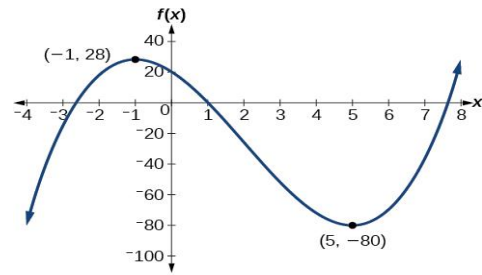
- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

3.



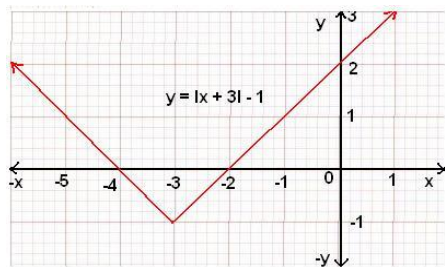
- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

4.

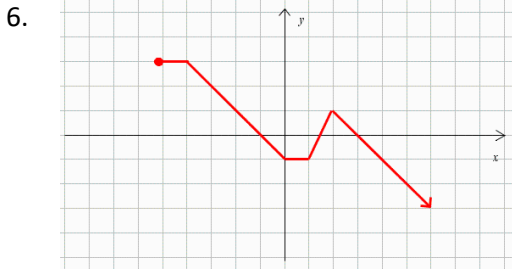


- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

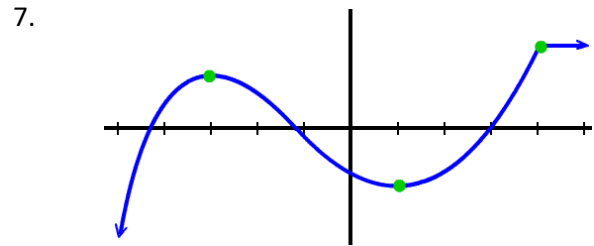
5.



- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

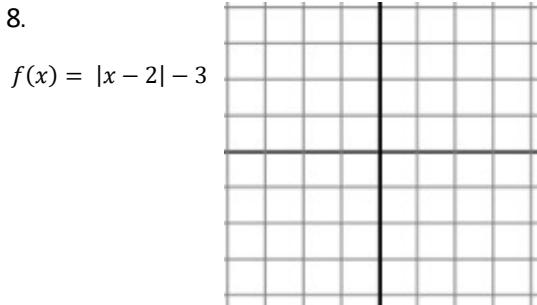


- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

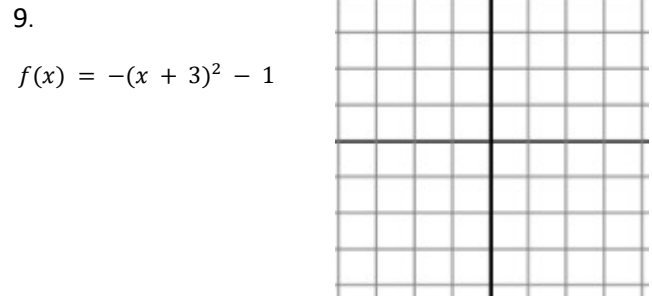


- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

Sketch the following equations using your knowledge of transformations. Find the intervals where the function is increasing, decreasing or constant. Find the relative max and/or mins.

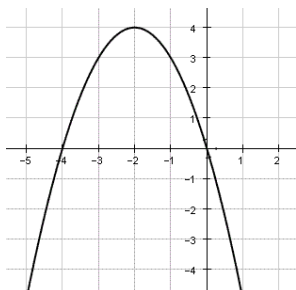


- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____



- Increasing _____
- Decreasing _____
- Constant _____
- Max _____
- Min _____

10. Find the relative maximum for each function. Then rank the functions below from the lowest relative maximum (1) to the highest relative maximum (4). Sketch a graph if needed.



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

$$y = -x^2 + 1$$

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)

max: _____ rank: _____

max: _____ rank: _____ max: _____ rank: _____

max: _____ rank: _____