

Domain & Range  
Increasing, Decreasing and Constant Worksheet

Name: \_\_\_\_\_

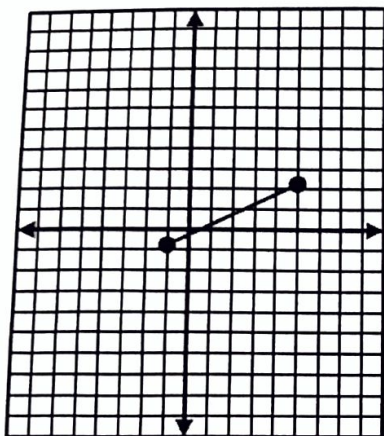
(Key)

Date: \_\_\_\_\_ Per: \_\_\_\_\_

For each problem:

- a) State Domain & Range in interval notation.  
b) State the interval that the function is increasing, decreasing or constant

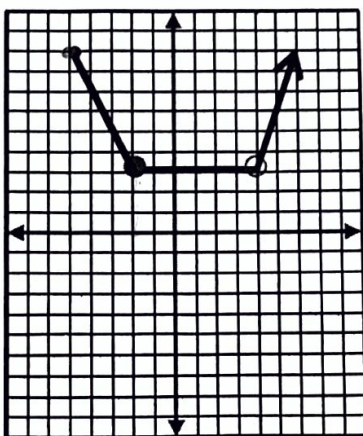
1.



a.  $D: [-1, 2]$   $R: [1, 2]$

b. Incr:  $(-1, 2)$   
Decr: none  
Constant: none

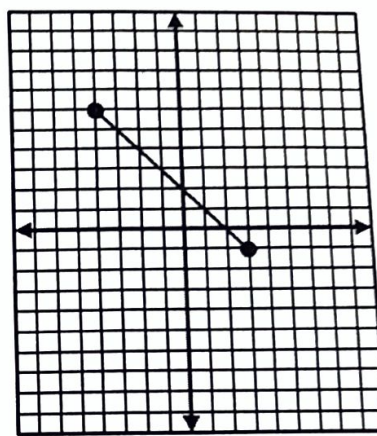
2.



a.  $D: [-5, 4) \cup (4, \infty)$   $R: [1, \infty)$

b. Incr:  $(4, \infty)$   
Decr:  $(-5, -2)$   
Con:  $(-2, 4)$

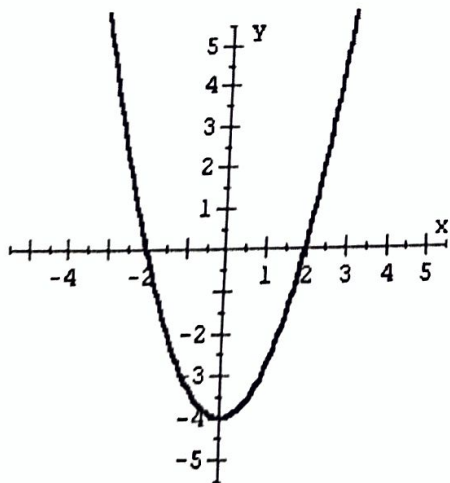
3.



a.  $D: [-4, 3]$   $R: [-1, 1]$

b. Incr: none  
Decr:  $(-4, 3)$   
Con: none

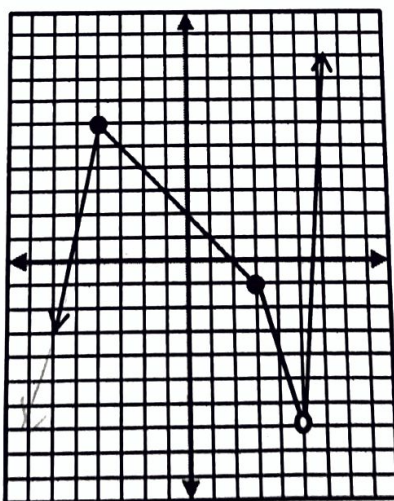
4.



a.  $D: (-\infty, \infty)$   $R: [-4, \infty)$

b. Incr:  $(0, \infty)$   
Decr:  $(-\infty, 0)$   
Con: none

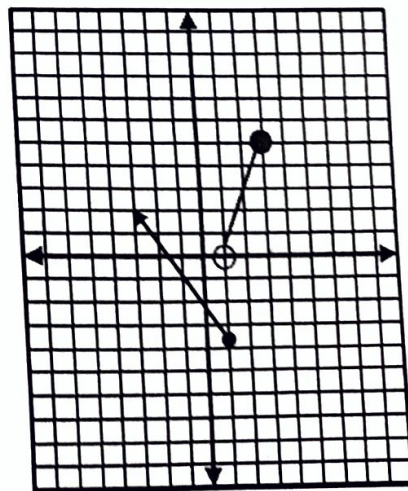
5.



a.  $D: (-\infty, 5) \cup (5, \infty)$   
 $R: (-\infty, \infty)$

b. Incr:  $(-\infty, -4) \cup (5, \infty)$   
Decr:  $(-4, 5)$   
Con: none

6.

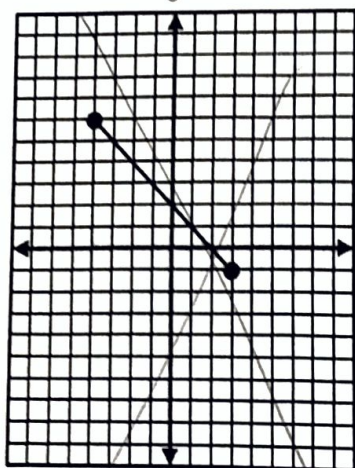


a.  $D: (-\infty, 3]$   $R: [-1, \infty)$

b. Incr:  $(1, 3)$  Decr:  $(-\infty, 1)$   
Con: none

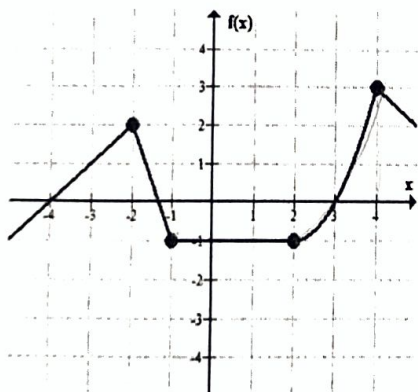
7.

omit same as #3



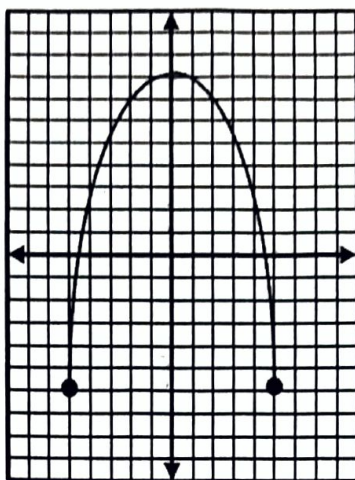
a. D: (-∞, ∞)  
 b. \_\_\_\_\_

10.



a. D: (-∞, ∞) R: (-∞, 3]  
 b. Inc: (-∞, -2) ∪ (2, 4)  
Dec: (-2, -1) ∪ (4, ∞)  
Constant: (-1, 2)

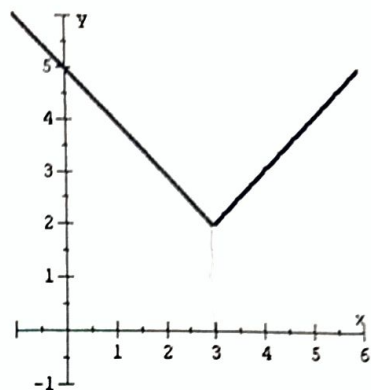
8.



a. D: [-5, 5] R: [-6, 8]  
 b. Inc: (-5, 0)  
Dec: (0, 5)  
Con: none

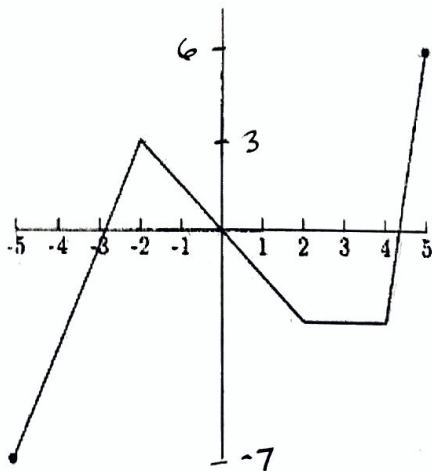
11.

9.

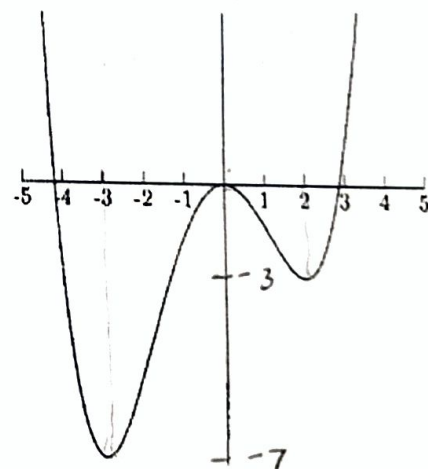


a. D: (-∞, ∞) R: [2, ∞)  
 b. Inc: (3, ∞)  
Dec: (-∞, 3)  
Con: none

12.



a. D: [-5, 5] R: [-7, 6]  
 b. Inc: (-7, -2) ∪ (4, 5)  
Dec: (-2, 2)  
Constant: (2, 4)



a. D: (-∞, ∞) R: [-7, ∞)  
 b. Inc: (-3, 0) ∪ (2, ∞)  
Dec: (-∞, -3) ∪ (0, 2)  
Constant: none