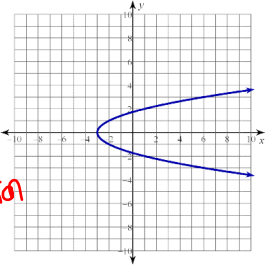
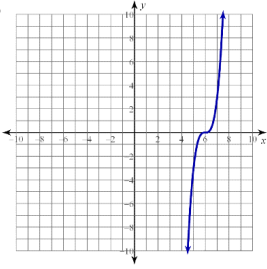
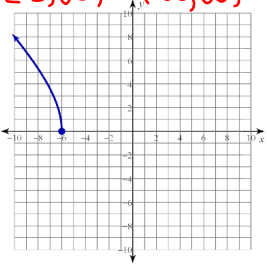
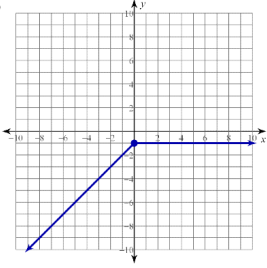


Name: \_\_\_\_\_

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

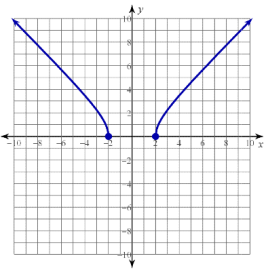
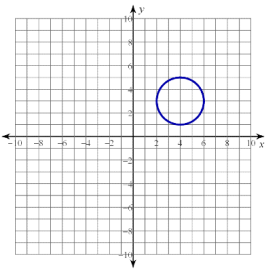
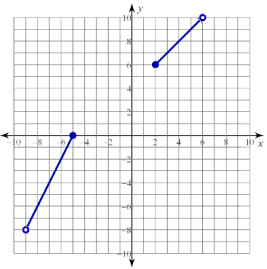
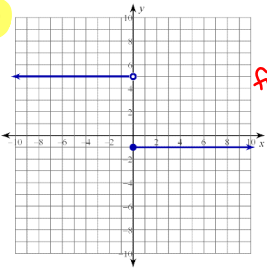
**Directions:** Identify the domain and range. Express the answers using the requested notation. After you have had practice with these problems, you should know which notations can be used for a given problem.

1) 	2) 		
Domain (Inequality Notation)	Range (Inequality Notation)	Domain (Inequality Notation)	Range (Inequality Notation)
Domain (Interval Notation)	Range (Interval Notation)	Domain (Interval Notation)	Range (Interval Notation)
3) 	4) 		
Domain (Inequality Notation)	Range (Inequality Notation)	Domain (Inequality Notation)	Range (Inequality Notation)
Domain (Interval Notation)	Range (Interval Notation)	Domain (Interval Notation)	Range (Interval Notation)

Not  
a  
function

$x \geq -3$   
left, right  
[-3,  $\infty$ )

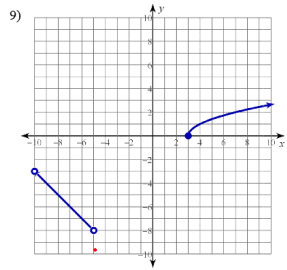
$\mathbb{R}$   
down, up  
( $-\infty$ ,  $\infty$ )

5) 	6) 		
Domain (Inequality Notation)	Range (Inequality Notation)	Domain (Inequality Notation)	Range (Inequality Notation)
Domain (Interval Notation)	Range (Interval Notation)	Domain (Interval Notation)	Range (Interval Notation)
7) 	8) 		
Domain (Inequality Notation)	Range (Inequality Notation)	Domain (Inequality Notation)	Range (Set Notation)
Domain (Interval Notation)	Range (Interval Notation)	Domain (Interval Notation)	Range (Set Notation)

function

$\mathbb{R}$   
left, right  
( $-\infty$ ,  $\infty$ )  
( $-\infty$ , 0)  $\cup$  [0,  $\infty$ )

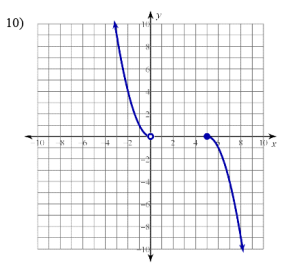
{-1, 5}



Domain (Inequality Notation)  $-10 < x < -5 \cup x \geq 3$  Range (Inequality Notation)  $-8 < y < -3 \cup y \geq 0$

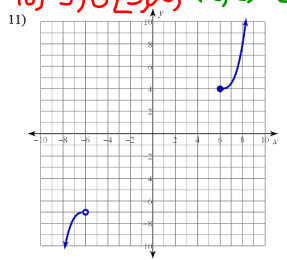
Domain (Interval Notation)  $(-10, -5) \cup [3, \infty)$  Range (Interval Notation)  $(-8, -3) \cup [0, \infty)$

left, right      left, right       $0 \leq y$



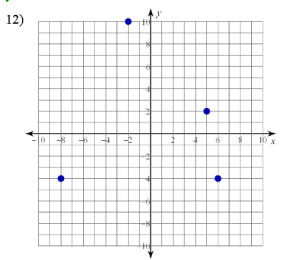
Domain (Inequality Notation)  $0 \leq x < 4$  Range (Inequality Notation)  $y \geq 1$

Domain (Interval Notation)  $[0, 4)$  Range (Interval Notation)  $[1, \infty)$



Domain (Inequality Notation)  $-8 < x < -5 \cup x \geq 3$  Range (Inequality Notation)  $-8 < y < -3 \cup y \geq 0$

Domain (Interval Notation)  $(-8, -5) \cup [3, \infty)$  Range (Interval Notation)  $(-8, -3) \cup [0, \infty)$



Domain (Set Notation)  $\{-2\} \cup [4, \infty)$  Range (Set Notation)  $\{10\} \cup [1, \infty)$

Domain (Interval Notation)  $\{-2\} \cup [4, \infty)$  Range (Interval Notation)  $\{10\} \cup [1, \infty)$