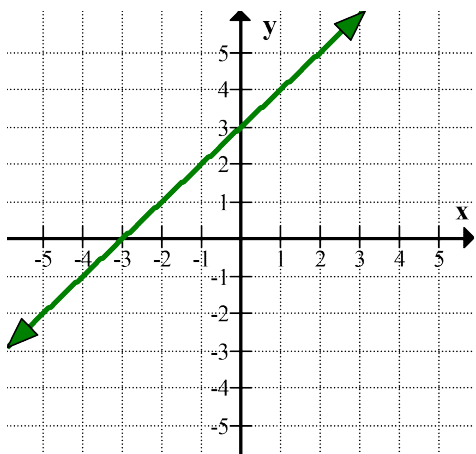


# M10 - 6.5 - Graph: Domain and Range Notes

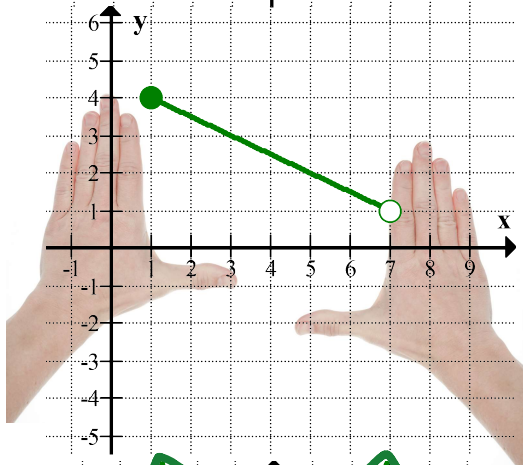


**Domain:**  
 Number Line:  
 Set Notation:  $\{x \mid x \in \mathbb{R}\}$   
 Interval Notation:  $(-\infty, \infty)$

$$\{x \mid -\infty < x < \infty\}$$

**Range:**  
 Number Line:  
 Set Notation:  $\{y \mid y \in \mathbb{R}\}$   
 Interval Notation:  $(-\infty, \infty)$

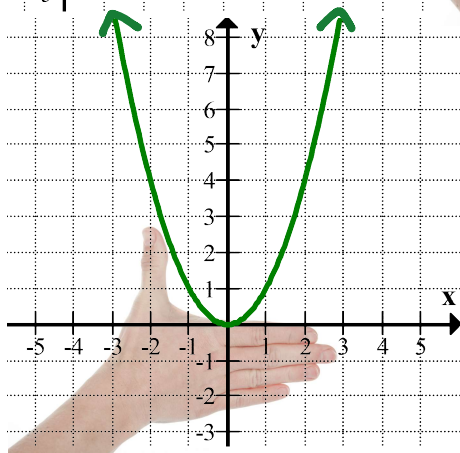
Use your Hands



**Domain:**  
 Number Line:  
 Set Notation:  $\{x \mid 1 \leq x < 7, x \in \mathbb{R}\}$   
 Interval Notation:  $[1, 7)$

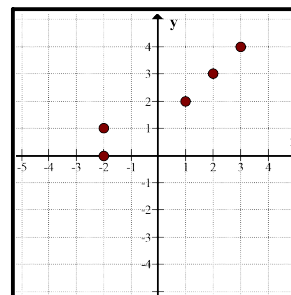
Rotate the Page!

**Range:**  
 Number Line:  
 Set Notation:  $\{y \mid 1 < y \leq 4, y \in \mathbb{R}\}$   
 Interval Notation:  $(1, 4]$



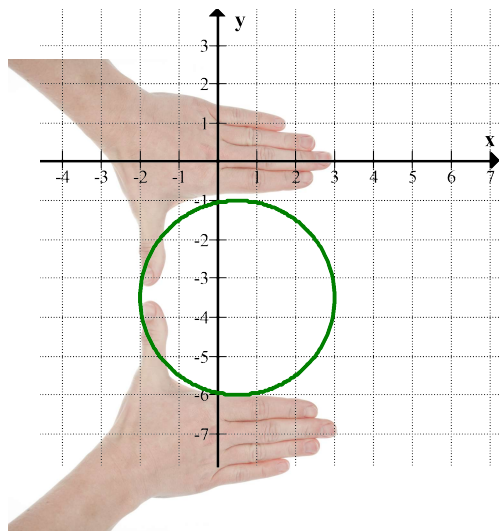
**Domain:**  
 Number Line:  
 Set Notation:  $\{x \mid x \in \mathbb{R}\}$   
 Interval Notation:  $(-\infty, \infty)$

**Range:**  
 Number Line:  
 Set Notation:  $\{y \mid y \geq 0, y \in \mathbb{R}\}$   
 Interval Notation:  $[0, \infty)$



Domain:  $\{-2, 1, 2, 3\}$   
 Range:  $\{0, 1, 2, 3, 4\}$

x	7
-2	0
-2	1
1	2
2	3
3	4



**Domain:**  
 Number Line:  
 Set Notation:  $\{x \mid -2 \leq x \leq 2, x \in \mathbb{R}\}$   
 Interval Notation:  $[-2, 2]$

**Range:**  
 Number Line:  
 Set Notation:  $\{y \mid -6 \leq y \leq -1, y \in \mathbb{R}\}$   
 Interval Notation:  $[-6, -1]$