Name: Key

Date:

Unit 6

LESSON 8

Do Now:

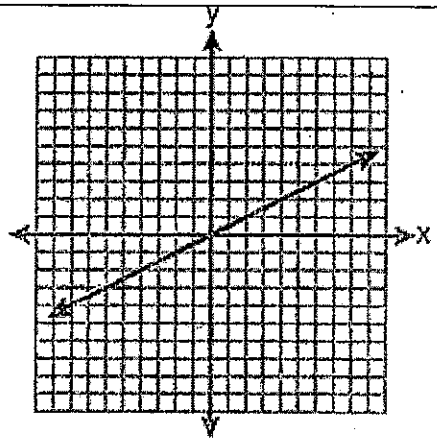
1. Given the relation: {(1, 2), (1, 1), (1, 0), (1, -1)}

a. State the domain: {1}

b. State the range: {2, 1, 0, -1}

c. Is the relation a function? Explain. NO b/c x values repeat

2. Given the graph below:



a. State the domain:

Set Builder: $\{x \mid x \in \mathbb{R}\}$

Interval Notation: $(-\infty, \infty)$

b. State the range:

Set Builder: $\{y \mid y \in \mathbb{R}\}$

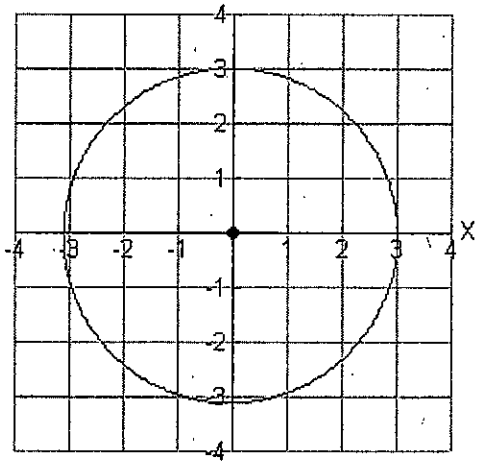
Interval Notation: $(-\infty, \infty)$

c. Is the graph a function? Explain. yes b/c x values don't repeat

Aim: Domain & Range (Day 2)

3. Is the graph a function? Explain.

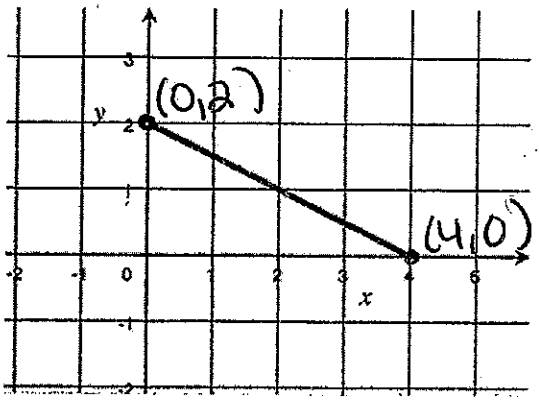
NO, not a function because x values repeat. Does not pass VLT



Domain:	**Range:**
Set Builder: $\{x \mid -3 \le x \le 3\}$	Set Builder: $\{y \mid -3 \le y \le 3\}$
Interval Notation: $[-3, 3]$	Interval Notation: $[-3, 3]$

Is the graph a function? Explain.

Yes. passes VLT

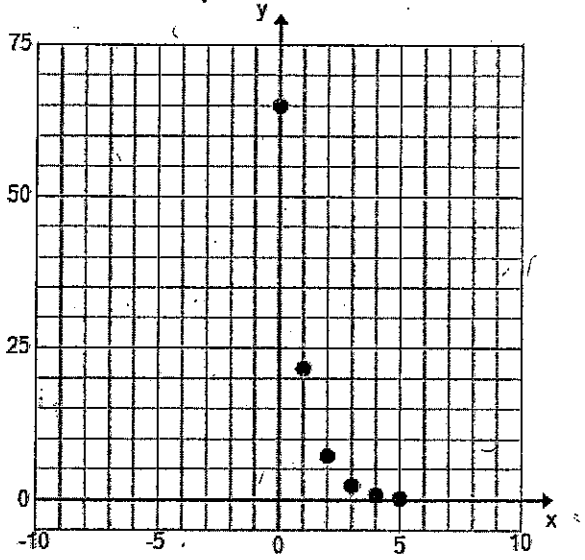


Domain:	**Range:**
Set Builder: $\{0 \leq x \leq 4\}$	Set Builder: $\{0 \leq y \leq 2\}$
Interval Notation: $[0,4]$	Interval Notation: $[0,2]$

5. Is the graph a function? Explain.

Not continuous

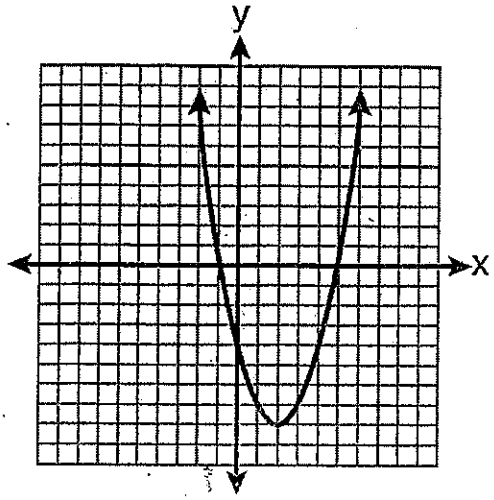
Yes, x values, don't repeat



Domain:	**Range:**
$\{0,1,2,3,4,5\}$	$\{65,22,7,3,1,0\}$

. Is the graph a function? Explain.

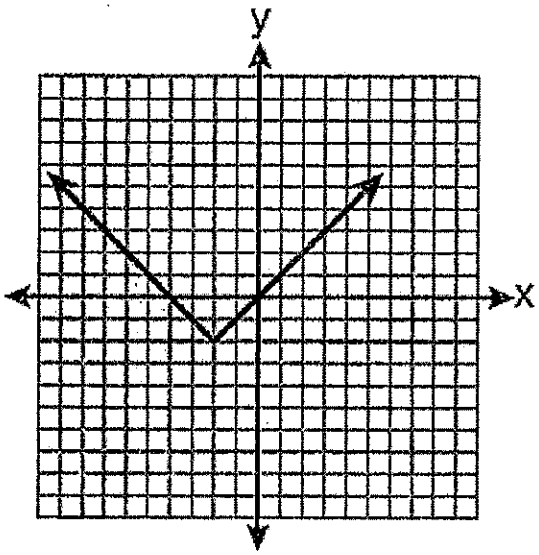
yes. x values don't repeat.



Domain: Set Builder: $\{x \mid x \in \mathbb{R}\}$	**Range:** Set Builder: $\{y \mid y \geq -8\}$
Interval Notation: $(-\infty, \infty)$	Interval Notation: $[-8, \infty)$

7. Is the graph a function? Explain.

yes, x values don't repeat



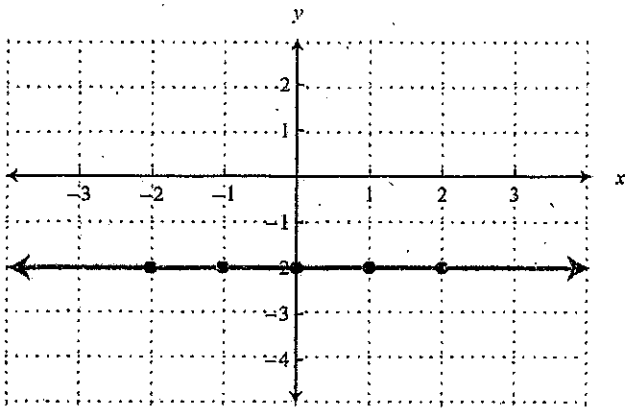
Domain: Set Builder: $\{x \mid x \in \mathbb{R}\}$	**Range:** Set Builder: $\{y \mid y \geq -2\}$
Interval Notation: $(-\infty, \infty)$	Interval Notation: $[-2, \infty)$

8. What do you notice about the domains for both functions? The domains are all real numbers. Both functions are continuous.

Is the graph a function? Explain.

yes, passes VLT

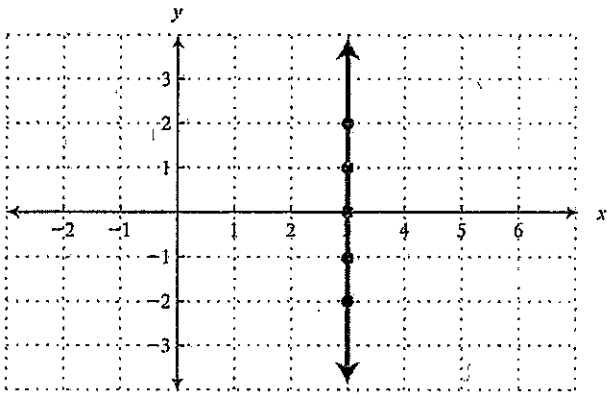
x values don't repeat



Domain:	**Range:**
Set Builder: $\{x \mid x \in \mathbb{R}\}$	Set Builder: $\{y \mid y = -2\}$
Interval Notation: $(-\infty, \infty)$	Interval Notation: $[-2]$

10. Is the graph a function? Explain.

NO, x-values repeat. Does not pass VLT



Domain:	**Range:**
Set Builder: $\{x \mid x = 3\}$	Set Builder: $\{y \mid y \in \mathbb{R}\}$
Interval Notation: $[3]$	Interval Notation: $(-\infty, \infty)$