

Use Set Notation Only

Name _____

Continuous Relations

KEY

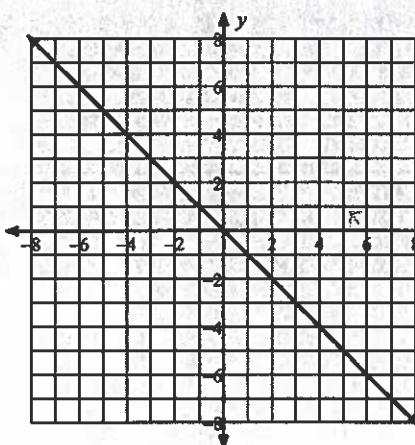
A

Each graph represents a relation. Determine if the relation is a function.

B State the domain.

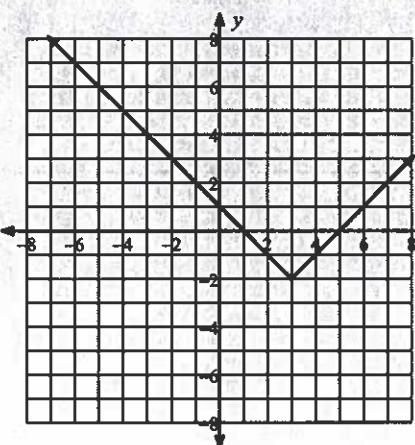
C State the range.

1)



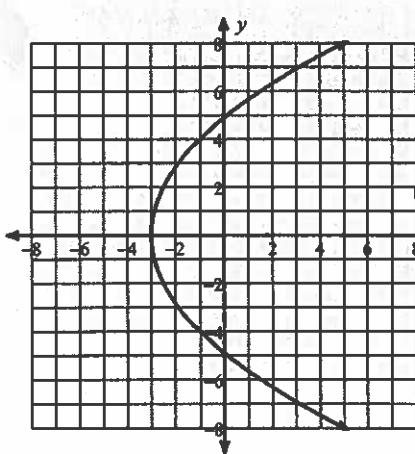
- (A) Yes
 (B) $\{x \mid x \in \mathbb{R}\}$
 (C) $\{y \mid y \in \mathbb{R}\}$

2)



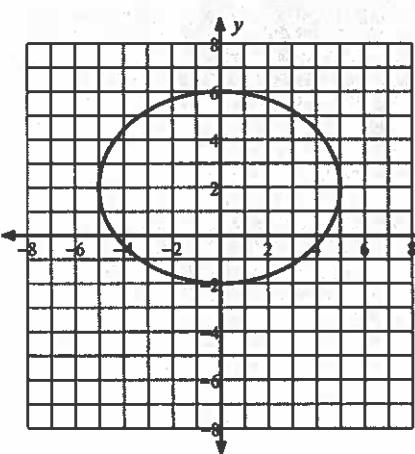
- (A) Yes
 (B) $\{x \mid x \in \mathbb{R}\}$
 (C) $\{y \mid y \geq 0, y \in \mathbb{R}\}$

3)



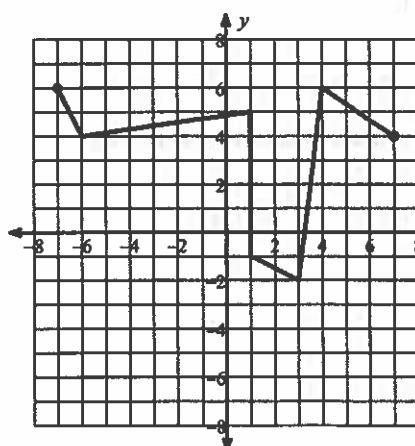
- (A) No
 (B) $\{x \mid x \geq -3, x \in \mathbb{R}\}$
 (C) $\{y \mid y \in \mathbb{R}\}$

4)



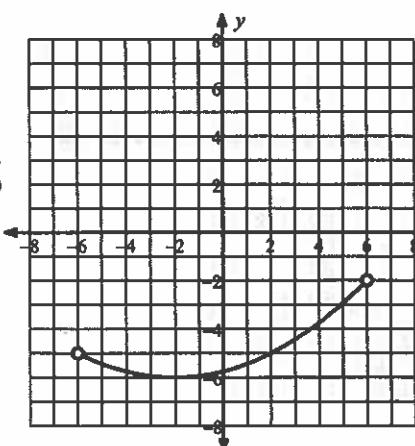
- (A) No
 (B) $\{x \mid -5 \leq x \leq 5, x \in \mathbb{R}\}$
 (C) $\{y \mid -2 \leq y \leq 6, y \in \mathbb{R}\}$

5)



- (A) No
 (B) $\{x \mid -7 \leq x \leq 7, x \in \mathbb{R}\}$
 (C) $\{y \mid -1 \leq y \leq 6, y \in \mathbb{R}\}$

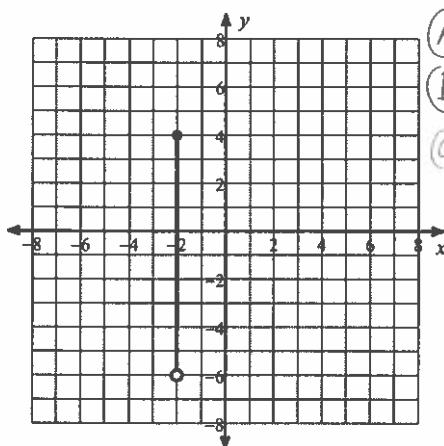
6)



- (A) Yes
 (B) $\{x \mid -6 < x < 6, x \in \mathbb{R}\}$
 (C) $\{y \mid -6 \leq y \leq -2, y \in \mathbb{R}\}$

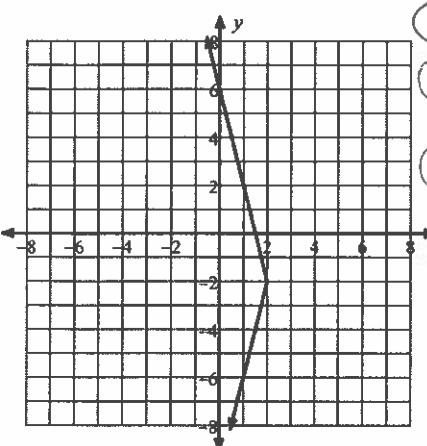
Each graph represents a relation. Determine if the relation is a function. Then find the domain and range.

7)



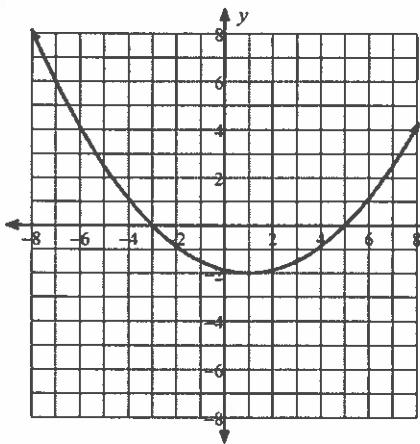
- (A) No
 (B) $\{x \mid x = -2\}$
 (C) $\{y \mid -6 \leq y \leq 4, y \in \mathbb{R}\}$

8)



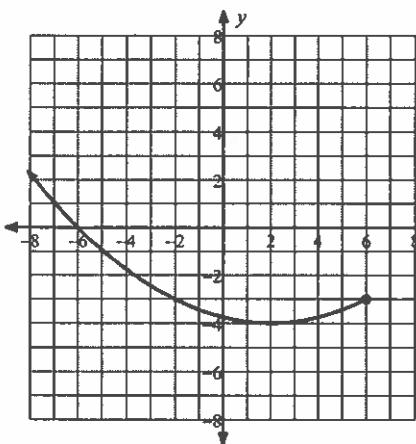
- (A) No
 (B) $\{x \mid x \leq 2, x \in \mathbb{R}\}$
 (C) $\{y \mid y \in \mathbb{R}\}$

9)



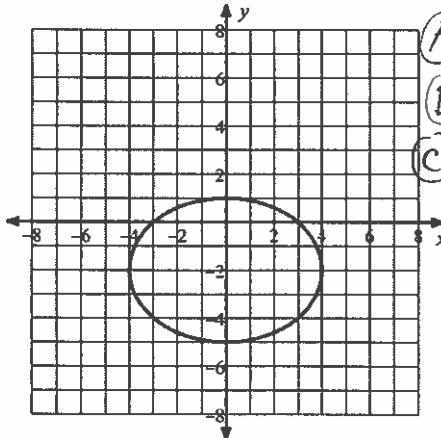
- (A) Yes
 (B) $\{x \mid x \in \mathbb{R}\}$
 (C) $\{y \mid y \geq -2, y \in \mathbb{R}\}$

10)



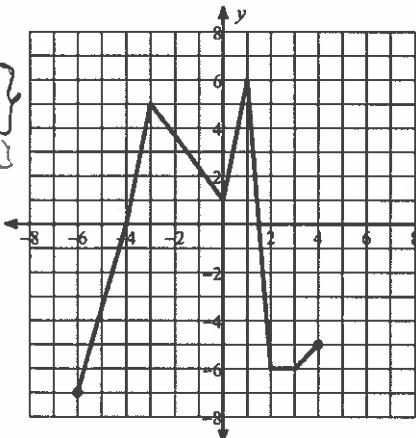
- (A) Yes
 (B) $\{x \mid x \leq 6, x \in \mathbb{R}\}$
 (C) $\{y \mid y \geq -4, y \in \mathbb{R}\}$

11)



- (A) No
 (B) $\{x \mid -4 \leq x \leq 4, x \in \mathbb{R}\}$
 (C) $\{y \mid -5 \leq y \leq 1, y \in \mathbb{R}\}$

12)



- (A) Yes
 (B) $\{x \mid -6 \leq x \leq 4, x \in \mathbb{R}\}$
 (C) $\{y \mid -7 \leq y \leq 7, y \in \mathbb{R}\}$