



## Function Domain/Range Definition - Set Builder to Inequality (Without Union)

1 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | 1 < Y < 9\}$$

A  $1 \leq Y < 9$  B  $1 < Y < 9$

2 What inequality describes domain on this number line?

$$\{X \in \mathbb{R} | X < -2\}$$

A  $X \leq -2$  B  $X < -2$

3 What inequality describes domain on this number line?

$$\{X \in \mathbb{R} | -6 < X < 7\}$$

A  $-6 < X < 7$  B  $-6 \leq X \leq 7$

4 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | 0 \leq Y \leq 4\}$$

A  $0 \leq Y \leq 4$  B  $Y \leq 4$

5 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | \}$$

A  $-\infty < Y < \infty$

B  $-10 \leq Y$

6 What inequality describes domain on this number line?

$$\{X \in \mathbb{R} | X < 2\}$$

A  $-8 < X \leq 2$

B  $X < 2$

7 What inequality describes domain on this number line?

$$\{X \in \mathbb{R} | 4 < X\}$$

A  $-\infty < X < \infty$

B  $4 < X$

8 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | -3 < Y < 8\}$$

A  $-3 \leq Y$

B  $-3 < Y < 8$