Function Domain/Range Definition - Set Builder to Inequality (With Union)

1 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | Y \leq 1 \text{ or } 3 \leq Y\}$$

A $-1 \leq Y \leq 1 \text{ or } -3 \leq Y \leq 3$

B $Y \leq 1 \text{ or } 3 \leq Y$

2 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | Y \leq 6 \text{ or } 8 \leq Y\}$$

A $Y < 6 \text{ or } -8 \leq Y \leq 8$

B $Y \leq 6 \text{ or } 8 \leq Y$

3 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | 0 \leq Y \leq 7 \text{ or } 8 \leq Y\}$$

A $0 \leq Y \leq 7 \text{ or } 8 \leq Y$

B $0 \leq Y < 7 \text{ or } 8 < Y$

4 What inequality describes domain on this number line?

$$\{X \in \mathbb{R} | X < 0 \text{ or } 3 < X\}$$

A $-1 < X < 1 \text{ or } -3 < X < 3$

B $X < 0 \text{ or } 3 < X$

5 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | Y \leq -5 \text{ or } -4 \leq Y\}$$

A $-5 \leq Y \leq 5 \text{ or } -4 < Y$

B $Y \leq -5 \text{ or } -4 \leq Y$

6 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | -1 < Y \leq 7 \text{ or } 8 < Y\}$$

A $-1 < Y \leq 7 \text{ or } 8 < Y$

B $-1 < Y \leq 7 \text{ or } -8 < Y < 8$

7 What inequality describes range on this number line?

$$\{Y \in \mathbb{R} | -2 < Y \leq 7 \text{ or } 8 < Y\}$$

A $-2 < Y \leq 7 \text{ or } 8 < Y$

B $-2 < Y < 7 \text{ or } -8 < Y < 8$

8 What inequality describes domain on this number line?

$$\{X \in \mathbb{R} | X \leq 2 \text{ or } 4 \leq X\}$$

A $-4 < X \leq 2 \text{ or } -4 \leq X \leq 4$

B $X \leq 2 \text{ or } 4 \leq X$