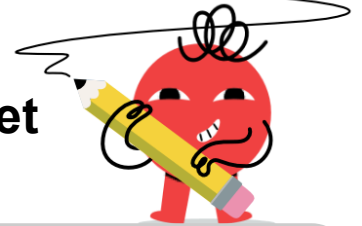




## Function Domain/Range Definition - Set Builder to Interval (With Union)



1 What interval describes this range?

$$\{Y \in \mathbb{R} | Y \leq -2 \text{ or } 1 \leq Y < 6\}$$

A  $(-\infty, -2] \cup [1, 6)$

B  $[-10, -2) \cup (1, 6]$

2 What interval describes this domain?

$$\{X \in \mathbb{R} | X < 0 \text{ or } 2 < X \leq 9\}$$

A  $(-\infty, 0) \cup (2, 9]$

B  $(-9, 0] \cup (2, 9)$

3 What interval describes this range?

$$\{Y \in \mathbb{R} | Y < 7 \text{ or } 9 < Y\}$$

A  $(-\infty, 7) \cup (9, 10)$

B  $(-\infty, 7) \cup (9, \infty)$

4 What interval describes this domain?

$$\{X \in \mathbb{R} | 3 \leq X \leq 7 \text{ or } 8 \leq X\}$$

A  $(3, 7) \cup (8, 10)$

B  $[3, 7] \cup [8, \infty)$

5 What interval describes this range?

$$\{Y \in \mathbb{R} | Y \leq 4 \text{ or } 7 < Y\}$$

A  $(-\infty, 4] \cup (7, \infty)$

B  $[-4, 4] \cup [7, \infty)$

6 What interval describes this domain?

$$\{X \in \mathbb{R} | X < 4 \text{ or } 6 \leq X\}$$

A  $(-4, 4) \cup [6, 10)$

B  $(-\infty, 4) \cup [6, \infty)$

7 What interval describes this range?

$$\{Y \in \mathbb{R} | -10 < Y < 0 \text{ or } 2 \leq Y\}$$

A  $(-10, 0) \cup [2, \infty)$

B  $[-10, 0] \cup [2, \infty)$

8 What interval describes this domain?

$$\{X \in \mathbb{R} | X < 6 \text{ or } 9 < X < 10\}$$

A  $(-6, 6) \cup [9, 10)$

B  $(-\infty, 6) \cup (9, 10)$