mobius

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

1

Which set describes the range of this interval? $(-\infty, 5] \cup (7, 10)$

A
$\{Y \in \mathbb{R} | -5 \leq Y \leq 5 \text{ or } 7 \leq Y \leq 10\}$

B
$\{Y \in \mathbb{R} | Y \leq 5 \text{ or } 7 < Y < 10\}$

2

Which set describes the range of this interval?

$(-\infty, 7) \cup (11, 10)$

A
$\{Y \in \mathbb{R} | Y < 7 \text{ or } 11 < Y < 10\}$

B
$\{Y \in \mathbb{R} | -7 < Y < 7 \text{ or } 10 \leq Y < 11\}$

3

Which set describes the domain of this interval? $[-6, 3] \cup (7, 10]$

A
$\{X \in \mathbb{R} | -6 \leq X \leq 3 \text{ or } 7 < X \leq 10\}$

B
$\{X \in \mathbb{R} | -6 \leq X < 3 \text{ or } 7 \leq X \leq 10\}$

4

Which set describes the domain of this interval?

$(-\infty, -1) \cup (2, \infty)$

A
$\{X \in \mathbb{R} | X < -1 \text{ or } 2 \leq X\}$

B
$\{X \in \mathbb{R} | X < -1 \text{ or } 2 < X\}$

5

Which set describes the domain of this interval? $[-5, 3) \cup (4, \infty)$

A
$\{X \in \mathbb{R} | -5 \leq X < 3 \text{ or } 4 < X\}$

B
$\{X \in \mathbb{R} | -5 < X \leq 3 \text{ or } 4 \leq X\}$

6

Which set describes the range of this interval? $(-\infty, -2) \cup (0, 9)$

A
$\{Y \in \mathbb{R} | -2 < Y < 2 \text{ or } 0 \leq Y \leq 9\}$

B
$\{Y \in \mathbb{R} | Y < -2 \text{ or } 0 < Y < 9\}$

7

Which set describes the domain of this interval? $[-4, 3] \cup [7, \infty)$

A
$\{X \in \mathbb{R} | -4 \leq X < 3 \text{ or } 7 \leq X < 10\}$

B
$\{X \in \mathbb{R} | -4 \leq X \leq 3 \text{ or } 7 \leq X\}$

8

Which set describes the domain of this interval? $(3, 7] \cup [8, \infty)$

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

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