



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

1	What interval describes this domain? $\{X \in \mathbb{R} 1 \leq X \leq 6 \text{ or } 8 \leq X\}$	2	What interval describes this domain? $\{X \in \mathbb{R} 2 < X \leq 7 \text{ or } 8 \leq X\}$
A	$[1, 6] \cup [8, \infty)$	A	$[2, 7) \cup [-8, 8]$
B	$(-\infty, 6] \cup [-8, 8]$	B	$(2, 7] \cup [8, \infty)$
3	What interval describes this domain? $\{X \in \mathbb{R} X \leq -3 \text{ or } 0 \leq X \leq 6\}$	4	What interval describes this domain? $\{X \in \mathbb{R} 2 < X \leq 7 \text{ or } 8 < X \leq 10\}$
A	$[-10, -3] \cup (0, 6)$	A	$[2, 7] \cup (8, \infty)$
B	$(-\infty, -3] \cup [0, 6]$	B	$(2, 7] \cup (8, 10]$
5	What interval describes this range? $\{Y \in \mathbb{R} Y < 4 \text{ or } 5 < Y \leq 10\}$	6	What interval describes this range? $\{Y \in \mathbb{R} Y < 4 \text{ or } 8 \leq Y \leq 10\}$
A	$(-\infty, 4] \cup (5, 10)$	A	$(-\infty, 4] \cup (8, 10)$
B	$(-\infty, 4) \cup (5, 10]$	B	$(-\infty, 4) \cup [8, 10]$
7	What interval describes this range? $\{Y \in \mathbb{R} -3 \leq Y < 5 \text{ or } 8 < Y < 10\}$	8	What interval describes this domain? $\{X \in \mathbb{R} X \leq 7 \text{ or } 8 \leq X < 10\}$
A	$[-3, 5) \cup (8, 10)$	A	$(-\infty, 7] \cup [8, 10)$
B	$[-3, 5) \cup [8, 10]$	B	$[-7, 7] \cup [8, 10)$