

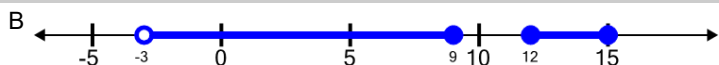


## Function Domain/Range Definition - Set Builder to Number Line (With Union)



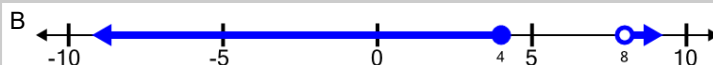
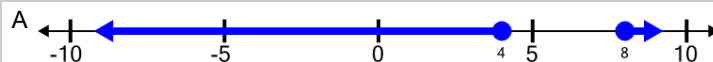
**1** What number line shows this range?

$$\{Y \in \mathbb{R} | -3 < Y \leq 9 \text{ or } 12 \leq Y \leq 15\}$$



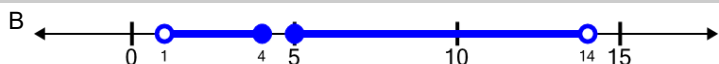
**2** What number line shows this domain?

$$\{X \in \mathbb{R} | X \leq 4 \text{ or } 8 < X\}$$



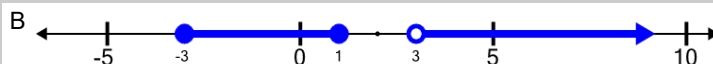
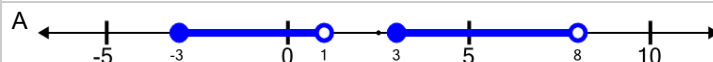
**3** What number line shows this domain?

$$\{X \in \mathbb{R} | 1 < X \leq 4 \text{ or } 5 \leq X < 14\}$$



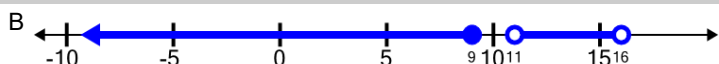
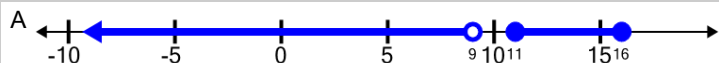
**4** What number line shows this range?

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



**5** What number line shows this domain?

$$\{X \in \mathbb{R} | X \leq 9 \text{ or } 11 < X < 16\}$$



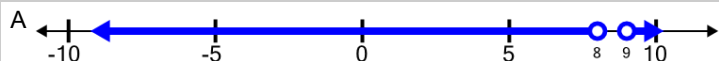
**6** What number line shows this domain?

$$\{X \in \mathbb{R} | -7 \leq X \leq 3 \text{ or } 6 < X \leq 12\}$$



**7** What number line shows this range?

$$\{Y \in \mathbb{R} | Y < 8 \text{ or } 9 < Y\}$$



**8** What number line shows this domain?

$$\{X \in \mathbb{R} | -6 \leq X < 7 \text{ or } 7 < X < 16\}$$

