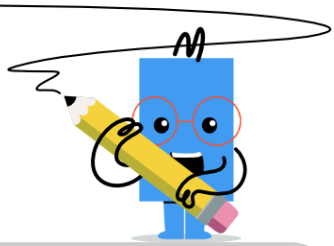
Name

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



1 What set describes the range of this inequality?

$$-1 \leq Y < 2 \text{ or } 2 < Y \leq 7$$

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

B $\{Y \in \mathbb{R} | -1 \leq Y < 2 \text{ or } 2 < Y \leq 7\}$

2 What set describes the range of this inequality? $Y < 2 \text{ or } 4 \leq Y$

A $\{Y \in \mathbb{R} | Y < 2 \text{ or } 4 \leq Y\}$

B $\{Y \in \mathbb{R} | Y \leq 2 \text{ or } 4 \leq Y \leq 13\}$

3 What set describes the range of this inequality?

$$1 \leq Y < 9 \text{ or } 9 < Y \leq 15$$

A $\{Y \in \mathbb{R} | 1 \leq Y < 9 \text{ or } 9 < Y \leq 15\}$

B $\{Y \in \mathbb{R} | 1 \leq Y < 9 \text{ or } 9 \leq Y < 15\}$

4 What set describes the range of this inequality?

$$Y < 5 \text{ or } 5 < Y \leq 13$$

A $\{Y \in \mathbb{R} | 0 \leq Y < 5 \text{ or } 5 \leq Y \leq 13\}$

B $\{Y \in \mathbb{R} | Y < 5 \text{ or } 5 < Y \leq 13\}$

5 What set describes the domain of this inequality?

$$1 < X \leq 4 \text{ or } 7 \leq X$$

A $\{X \in \mathbb{R} | 1 < X \leq 4 \text{ or } 7 \leq X\}$

B $\{X \in \mathbb{R} | 1 \leq X < 4 \text{ or } 7 \leq X\}$

6 What set describes the domain of this inequality?

$$2 < X \leq 6 \text{ or } 9 < X \leq 16$$

A $\{X \in \mathbb{R} | 2 < X \leq 6 \text{ or } 9 < X \leq 16\}$

B $\{X \in \mathbb{R} | 2 < X \leq 6 \text{ or } 9 \leq X \leq 16\}$

7 What set describes the domain of this inequality?

$$X \leq -7 \text{ or } -4 \leq X$$

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

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

8 What set describes the range of this inequality?

$$4 < Y < 7 \text{ or } 8 \leq Y < 14$$

A $\{Y \in \mathbb{R} | 4 \leq Y < 7 \text{ or } 8 \leq Y < 14\}$

B $\{Y \in \mathbb{R} | 4 < Y < 7 \text{ or } 8 \leq Y < 14\}$