

mobius

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



1	
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What inequality

All real numbers greater than 2 and less than or equal to 5 OR greater than or equal to 9 and less than 18

describes this domain?

$$2^{A} < X \le 5 \text{ or } 9 \le X < 18$$

$$\overset{\scriptscriptstyle\mathsf{B}}{2}$$
 $<$ X \leq 5 or 9 \leq X

2

All real numbers greater than 2 and less than or equal to 8 OR greater than 11

What inequality describes this range?

$$2^{A} < Y \le 8 \text{ or } 11 < Y$$

$$\overset{\mathtt{B}}{\mathtt{2}}$$
 $<$ Y \leq $\mathtt{8}$ or $\mathtt{11}$ \leq Y

3

What inequality describes this domain?

All real numbers greater than -2 and less than 7 OR greater than 11 and less than 17

B
$$-2 < X < 7$$
 or $11 \le X < 17$

-2 < X < 7 or 11 < X < 17

4

All real numbers less than -2 OR greater than or equal to 2 and less than or equal to 9

What inequality describes this range?

$$\stackrel{ ext{A}}{Y}$$
 $<$ -2 or 2 \leq Y \leq 9

$$\stackrel{\mathsf{B}}{Y}$$
 $<$ -2 or 2 \leq Y $<$ 9

5

All real numbers greater than or equal to -4 and less than or equal to 5 OR greater than 9 and less than 12

What inequality describes this range?

-4 < Y < 5 or 9 < Y < 12

$$^{\mathsf{B}}$$
 $-4 < Y \le 5$ or $9 \le Y < 12$

6

All real numbers less than 4 OR greater than or equal to 6 and less than or equal to 10

What inequality describes this range?

$$\stackrel{ ext{A}}{Y}$$
 $<$ 4 or 6 \leq Y \leq 10

$$-6 \le Y \le 4 \text{ or } 6 < Y < 10$$

What inequality 7 describes this range? Α

All real numbers less than or equal to -1 OR greater than 0

8

What inequality describes this domain?

$$|Y < -1 ext{ or } 0 < Y|Y \le -1 ext{ or } 0 < Y$$

All real numbers less than 4 OR greater than 4 and less than or equal to 7

 $-4 \le X \le 4 \text{ or } 4 < X < 7$

$$\stackrel{ extsf{B}}{X}$$
 $<$ 4 or 4 $<$ X \le 7