

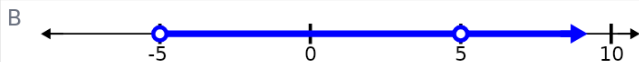
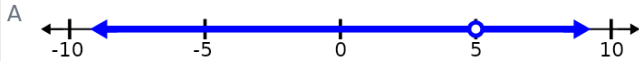


## Determine restrictions of rational functions

**1**

What number line shows the domain of this function?

$$f(x) = \frac{5}{1x - 5}$$


**2**

What set describes the domain of this function?

$$f(x) = \frac{-5}{1x - 0}$$

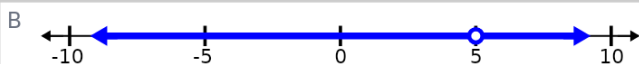
A  $\{X \in \mathbb{R} \mid X < 0 \text{ or } 0 < X\}$

B  $\{X \in \mathbb{R} \mid -1 < X < 1 \text{ or } 0 < X\}$

**3**

What number line shows the domain of this function?

$$f(x) = \frac{-1x - 5}{1x - 5}$$


**4**

What number line shows the domain of this function?

$$f(x) = \frac{-3}{-4x^2 + 4x + 8}$$


**5**

What set describes the domain of this function?

$$f(x) = \frac{4}{1x^2 - 3x - 0}$$

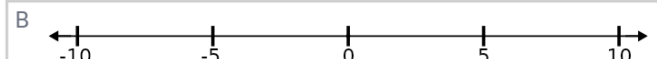
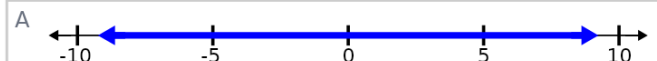
A  $\{X \in \mathbb{R} \mid X < 0 \text{ or } 0 < X < 3 \text{ or } 3 < X\}$

B  $\{X \in \mathbb{R} \mid X < 0 \text{ or } 0 < X \leq 3 \text{ or } -3 < X < 3\}$

**6**

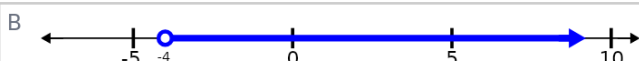
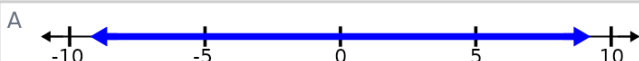
What number line shows the domain of this function?

$$f(x) = \frac{-4}{-1x^2 - 5x - 8}$$


**7**

What number line shows the domain of this function?

$$f(x) = \frac{1x + 2}{-3x^2 + 4x - 24}$$

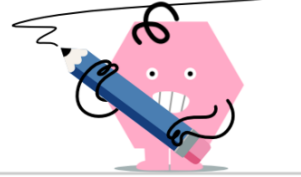

**8**

What set describes the domain of this function?

$$f(x) = \frac{1x + 4}{-5x^2 + 4x - 15}$$

A  $\{\}$

B  $\{X \in \mathbb{R} \mid \}$



## Determine restrictions of rational functions

**9**

What set describes the domain of this function?

$$f(x) = \frac{-1x + 2}{1x^2 - 1x - 6}$$

A

$$\{X \in \mathbb{R} \mid -2 \leq X < 1 \text{ or } -2 \leq X \leq 3 \text{ or } -3 < X < 3\}$$

B

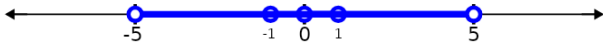
$$\{X \in \mathbb{R} \mid X < -2 \text{ or } -2 < X < 3 \text{ or } 3 < X\}$$

**10**

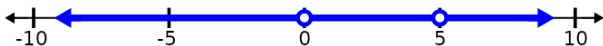
What number line shows the domain of this function?

$$f(x) = \frac{-1x + 4}{2x^2 - 10x - 0}$$

A



B

**11**

What number line shows the domain of this function?

$$f(x) = \frac{-1x - 5}{4x^2 - 8x + 25}$$

A



B

**12**

What set describes the domain of this function?

$$f(x) = \frac{1x - 2}{4x^2 - 2x + 10}$$

A

$$\{\}$$

B

$$\{X \in \mathbb{R} \mid \}$$