



Function Domain - Simple Root of Quadratic (Real Roots) to Domain

Definition

1 What set describes the domain of this function?

$$f(x) = \sqrt{1x^2 - 10x + 16}$$

A $\{X \in \mathbb{R} | X \leq 2 \text{ or } 8 \leq X\}$

B $\{X \in \mathbb{R} | -2 \leq X \leq 2 \text{ or } 8 < X\}$

2 What set describes the domain of this function?

$$f(x) = \sqrt{2x^2 - 6x + 4}$$

A $\{X \in \mathbb{R} | -1 \leq X \leq 1 \text{ or } 1 < X < 2\}$

B $\{X \in \mathbb{R} | X \leq 1 \text{ or } 2 \leq X\}$

3 What set describes the domain of this function?

$$f(x) = \sqrt{3x^2 - 6x - 0}$$

A $\{X \in \mathbb{R} | X \leq 0 \text{ or } 2 \leq X\}$

B $\{X \in \mathbb{R} | X < 0 \text{ or } 2 \leq X\}$

4 What set describes the domain of this function?

$$f(x) = \sqrt{-1x^2 - 7x - 12}$$

A $\{X \in \mathbb{R} | -4 < X < -3\}$

B $\{X \in \mathbb{R} | -4 \leq X \leq -3\}$

5 What set describes the domain of this function?

$$f(x) = \sqrt{-5x^2 + 5x + 10}$$

A $\{X \in \mathbb{R} | -1 \leq X \leq 2\}$

B $\{X \in \mathbb{R} | -1 \leq X < 2\}$

6 What set describes the domain of this function?

$$f(x) = \sqrt{-2x^2 - 6x + 20}$$

A $\{X \in \mathbb{R} | -5 < X < 2\}$

B $\{X \in \mathbb{R} | -5 \leq X \leq 2\}$

7 What set describes the domain of this function?

$$f(x) = \sqrt{2x^2 - 0x - 8}$$

A $\{X \in \mathbb{R} | X \leq -2 \text{ or } 2 < X\}$

B $\{X \in \mathbb{R} | X \leq -2 \text{ or } 2 \leq X\}$

8 What set describes the domain of this function?

$$f(x) = \sqrt{1x^2 - 7x - 0}$$

A $\{X \in \mathbb{R} | X \leq 0 \text{ or } 7 \leq X\}$

B $\{X \in \mathbb{R} | X \leq 0 \text{ or } -7 \leq X \leq 7\}$