



Function Domain - Fraction Root of Linear over Root of Quadratic (Real Roots) to Domain Definition

1

$$f(x) = \frac{\sqrt{1x+1}}{\sqrt{3x^2+9x-0}}$$

What set describes the domain of this function?

A $\{X \in \mathbb{R} | 0 < X\}$

B $\{X \in \mathbb{R} | 0 \leq X\}$

2

What set describes the domain of this function?

$$f(x) = \frac{\sqrt{-1x-1}}{\sqrt{1x^2-9x+8}}$$

A

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

B

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

3

What set describes the domain of this function?

$$f(x) = \frac{\sqrt{1x+2}}{\sqrt{1x^2+6x-0}}$$

A

$$\{X \in \mathbb{R} | -6 \leq X < 0\}$$

B

$$\{X \in \mathbb{R} | 0 < X\}$$

4

What set describes the domain of this function?

$$f(x) = \frac{\sqrt{1x+2}}{\sqrt{-1x^2-6x-0}}$$

A

$$\{X \in \mathbb{R} | -2 \leq X < 0\}$$

B

$$\{X \in \mathbb{R} | -2 \leq X \leq 0\}$$

5

What set describes the domain of this function?

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

A

$$\{X \in \mathbb{R} | X < -6\}$$

B

$$\{X \in \mathbb{R} | -6 < X\}$$

6

What set describes the domain of this function?

$$f(x) = \frac{\sqrt{1x+1}}{\sqrt{-1x^2+6x+16}}$$

A

$$\{X \in \mathbb{R} | -1 \leq X \leq 8\}$$

B

$$\{X \in \mathbb{R} | -1 \leq X < 8\}$$

7

What set describes the domain of this function?

$$f(x) = \frac{\sqrt{1x-5}}{\sqrt{1x^2+2x-0}}$$

A $\{X \in \mathbb{R} | 5 \leq X\}$

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

8

What set describes the domain of this function?

$$f(x) = \frac{\sqrt{-1x-0}}{\sqrt{5x^2+5x-10}}$$

A

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

B

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