



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

Definition

1 What set describes the domain of this function? $f(x) = \frac{-1x + 4}{\sqrt{1x^2 + 5x - 14}}$

A $\{X \in \mathbb{R} | X < -7 \text{ or } 2 < X\}$

B $\{X \in \mathbb{R} | -7 < X < 7 \text{ or } -2 < X < 2\}$

2 What set describes the domain of this function? $f(x) = \frac{1x - 2}{\sqrt{1x^2 - 0x - 4}}$

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

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

3 What set describes the domain of this function? $f(x) = \frac{1x - 1}{\sqrt{-1x^2 - 1x - 0}}$

A $\{X \in \mathbb{R} | -1 < X < 0\}$

B $\{X \in \mathbb{R} | -1 \leq X \leq 0\}$

4 What set describes the domain of this function? $f(x) = \frac{1x + 2}{\sqrt{1x^2 + 5x - 0}}$

A $\{X \in \mathbb{R} | X < -5 \text{ or } 0 < X\}$

B $\{X \in \mathbb{R} | -5 < X < 5 \text{ or } -1 < X < 1\}$

5 What set describes the domain of this function? $f(x) = \frac{1x - 4}{\sqrt{-1x^2 - 2x - 0}}$

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

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

6 What set describes the domain of this function? $f(x) = \frac{1x + 4}{\sqrt{3x^2 - 6x - 9}}$

A $\{X \in \mathbb{R} | -1 < X < 1 \text{ or } -3 < X < 3\}$

B $\{X \in \mathbb{R} | X < -1 \text{ or } 3 < X\}$

7 What set describes the domain of this function? $f(x) = \frac{-1x - 0}{\sqrt{-1x^2 + 7x - 12}}$

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

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

8 What set describes the domain of this function? $f(x) = \frac{1x + 2}{\sqrt{-1x^2 - 8x - 15}}$

A $\{X \in \mathbb{R} | -5 < X < -3\}$

B $\{X \in \mathbb{R} | -5 \leq X \leq -3\}$