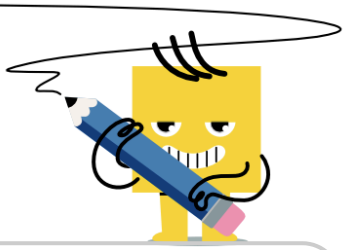
Name



Rational Functions and Asymptotes - Calculate Slant Asymptote (Expanded, With Remainder)

1

What is the slant asymptote of this rational function? $f(x) = \dfrac{-x^2 - x + 2}{x - 4}$

A Slant asymptote at $y = x - 3$

B Slant asymptote at $y = -x - 5$

C Slant asymptote at $y = 3x - 6$

D Slant asymptote at $y = -2x - 2$

2

What is the slant asymptote of this rational function? $f(x) = \dfrac{3x^2 - 12}{x}$

A Slant asymptote at $y = -2x + 2$

B Slant asymptote at $y = 3x$

C Slant asymptote at $y = -3x - 8$

D Slant asymptote at $y = 3x + 7$

3

What is the slant asymptote of this rational function? $f(x) = \dfrac{3x^2 - 9x}{x - 1}$

A Slant asymptote at $y = 3x - 6$

B Slant asymptote at $y = -2x + 5$

C Slant asymptote at $y = -3x - 2$

D Slant asymptote at $y = -2x - 1$

4

What is the slant asymptote of this rational function? $f(x) = \dfrac{-x^2 - x + 2}{x - 3}$

A Slant asymptote at $y = -2x + 4$

B Slant asymptote at $y = -x + 5$

C Slant asymptote at $y = -x - 4$

D Slant asymptote at $y = x + 5$

5

What is the slant asymptote of this rational function? $f(x) = \dfrac{2x^2 + 2x}{x + 2}$

A Slant asymptote at $y = 2x + 5$

B Slant asymptote at $y = -x - 4$

C Slant asymptote at $y = 2x - 2$

D Slant asymptote at $y = -3x + 3$

6

What is the slant asymptote of this rational function? $f(x) = \dfrac{2x^2 + 10x + 12}{x + 1}$

A Slant asymptote at $y = 3x - 5$

B Slant asymptote at $y = x - 7$

C Slant asymptote at $y = -2x + 7$

D Slant asymptote at $y = 2x + 8$

7

What is the slant asymptote of this rational function? $f(x) = \dfrac{x^2 - 5x + 6}{x + 1}$

A Slant asymptote at $y = -3x - 4$

B Slant asymptote at $y = x - 6$

C Slant asymptote at $y = 2x + 1$

D Slant asymptote at $y = -x$

8

What is the slant asymptote of this rational function? $f(x) = \dfrac{2x^2 - 2x}{x + 1}$

A Slant asymptote at $y = 2x - 1$

B Slant asymptote at $y = 3x + 3$

C Slant asymptote at $y = 2x - 4$

D Slant asymptote at $y = -x$