Name

Rational Functions and Asymptotes - Calculate Slant Asymptote (Factored, No Remainder)

1

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

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

B Slant asymptote at $y = 3x + 4$

C Slant asymptote at $y = 2x - 6$

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

2

What is the slant asymptote of this rational function? $f(x) = \frac{2(x+4)(x+3)}{(x+3)}$

A Slant asymptote at $y = x + 5$

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

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

D Slant asymptote at $y = 3x + 6$

3

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

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

B Slant asymptote at $y = x$

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

D Slant asymptote at $y = -2x - 5$

4

What is the slant asymptote of this rational function? $f(x) = \frac{-3(x+4)x}{(x+4)}$

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

B Slant asymptote at $y = -2x - 9$

C Slant asymptote at $y = -3x$

D Slant asymptote at $y = -2x + 6$

5

What is the slant asymptote of this rational function? $f(x) = \frac{-(x-3)(x-4)}{(x-3)}$

A Slant asymptote at $y = x$

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

C Slant asymptote at $y = -2x - 8$

D Slant asymptote at $y = x + 6$

6

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

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

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

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

D Slant asymptote at $y = x - 2$

7

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

A Slant asymptote at $y = -3x + 2$

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

C Slant asymptote at $y = 2x + 6$

D Slant asymptote at $y = -3x + 1$

8

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

A Slant asymptote at $y = x - 3$

B Slant asymptote at $y = x + 1$

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

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