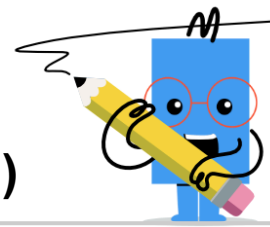
Name

Rational Functions and Asymptotes - Hole or Vertical Asymptote (Expanded)



1 Is there a hole or a vertical asymptote at x=0 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 + 4x}{x^2 + 6x + 8}$

A Hole	B Vertical Asymptote
C Neither	

2 Is there a hole or a vertical asymptote at x=-4 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 + 6x + 8}{x^2 + 4x}$

A Vertical Asymptote	B Hole
C Neither	

3 Is there a hole or a vertical asymptote at x=-2 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 - 4x + 3}{x^2 - x - 6}$

A Vertical Asymptote	B Hole
C Neither	

4 Is there a hole or a vertical asymptote at x=3 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 - 4x + 3}{x^2 + 2x - 3}$

A Neither	B Hole
C Vertical Asymptote	

5 Is there a hole or a vertical asymptote at x=-1 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 + 3x + 2}{x^2 - 3x - 4}$

A Neither	B Hole
C Vertical Asymptote	

6 Is there a hole or a vertical asymptote at x=-3 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 + 7x + 12}{x^2 + 5x + 6}$

A Vertical Asymptote	B Neither
C Hole	

7 Is there a hole or a vertical asymptote at x=4 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 - x}{x^2 - 5x + 4}$

A Neither	B Vertical Asymptote
C Hole	

8 Is there a hole or a vertical asymptote at x=4 when this polynomial is divided by this binomial? $f(x) = \frac{x^2 - 4x}{x^2 - 16}$

A Hole	B Vertical Asymptote
C Neither	