Name

Rational Functions and Asymptotes - Locate Holes (Expanded)

1 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{x^2 + 3x + 2}{x^2 + 3x + 2}$$

A	$x = -2,\ x = -1$	B	$x = 1,\ x = 2$
C	$x = 0,\ x = 1$	D	No holes

2 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{3x - 3}{x^2 + 2x - 3}$$

A	$x = -1$	B	$x = 1$
C	$x = -3$	D	No holes

3 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{x^2 + 3x - 4}{x + 4}$$

A	No holes	B	$x = 1$
C	$x = -4$	D	$x = 4$

4 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{x - 2}{x^2 - 2x}$$

A	$x = 0$	B	$x = 2$
C	No holes	D	$x = -2$

5 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{x - 4}{x - 4}$$

A	$x = -4$	B	$x = 4$
C	$x = -1,\ x = 2$	D	No holes

6 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{3x^2 + 9x}{x}$$

A	$x = -3$	B	$x = -2,\ x = 0$
C	No holes	D	$x = 0$

7 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{x + 3}{x^2 + 3x}$$

A	No holes	B	$x = -3$
C	$x = 0$	D	$x = 3$

8 Where are the holes when this polynomial is divided by this binomial?

$$f(x) = \frac{3x + 12}{x + 4}$$

A	$x = 2$	B	$x = -4$
C	No holes	D	$x = 4$