

WRITE THE EQUATION OF THE RATIONAL FUNCTION GIVEN:

1. Vertical Asymptote: $x = 3$

Horizontal Asymptote: $y = -2$

Zero of the function: $(-6, 0)$

$$f(x) = \frac{-2(x+6)}{(x-3)} = \frac{-2x-12}{x-3}$$

y-int: $(0, 4)$

WRITE THE EQUATION OF THE RATIONAL FUNCTION GIVEN:

2. Vertical Asymptote: $x = -4$

No Horizontal Asymptote

Zero of the Function: $(3, 0)$

Hole in the Graph at $x = 2$

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