

Graphing Rational Functions

State any holes and asymptotes for the following functions

1. $f(x) = \frac{x+5}{x+1}$

2. $f(x) = \frac{(x+3)(x-1)}{(x-3)(x-1)}$

Sketch the graph of the given rational function and analyze.

7. $f(x) = \frac{x-1}{x+1}$

X - intercept:

Y - intercept:

V Asymptote:

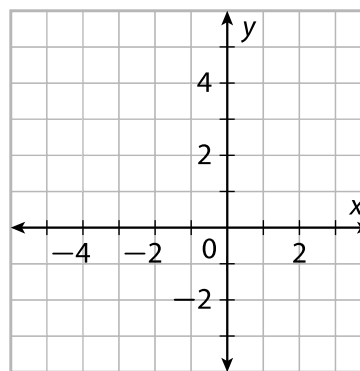
H Asymptote:

Hole(s):

Domain:

Range:

End Behavior:



Asymptote Behavior:

8. $f(x) = \frac{x-1}{x-2}$

8.

X - intercept:

Y - intercept:

V Asymptote:

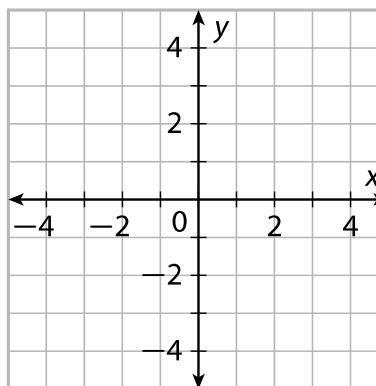
H Asymptote:

Hole(s):

Domain:

Range:

End Behavior:



Asymptote Behavior:

9. $f(x) = \frac{3x - 2}{x - 3}$

X - intercept:

Y - intercept:

V Asymptote:

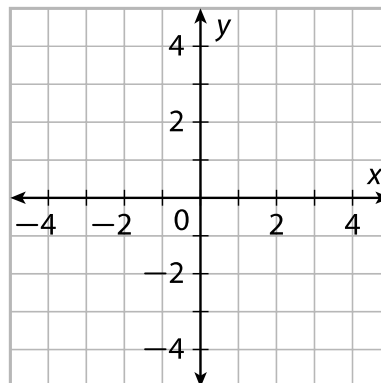
H Asymptote:

Hole(s):

Domain:

Range:

End Behavior:



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

X - intercept:

Y - intercept:

V Asymptote:

H Asymptote:

Hole(s):

Domain:

Range:

End Behavior:

