

Honors Algebra 2  
Graphing Rational Functions

Rational Reasoner: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

Complete all of the information below to graph each rational function.

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

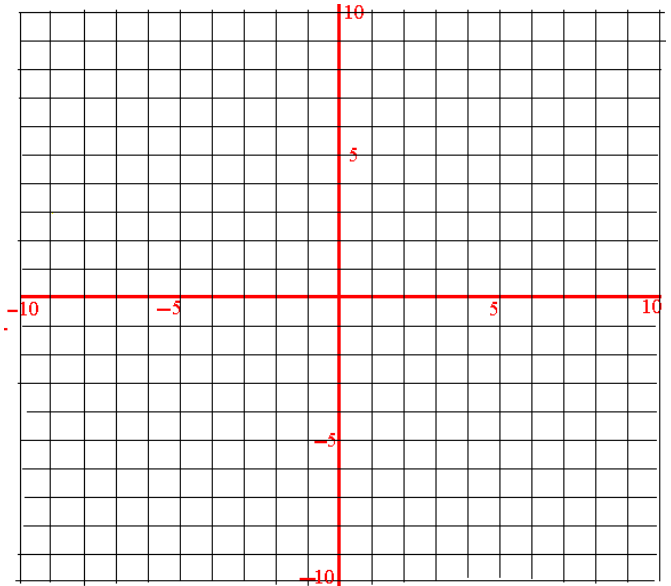
y-intercept: \_\_\_\_\_

Holes: \_\_\_\_\_

Vertical Asymptotes: \_\_\_\_\_ Horizontal Asymptotes: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

End-Behavior:  
\_\_\_\_\_  
\_\_\_\_\_



2.)  $t(x) = \frac{1}{(x+3)^2}$

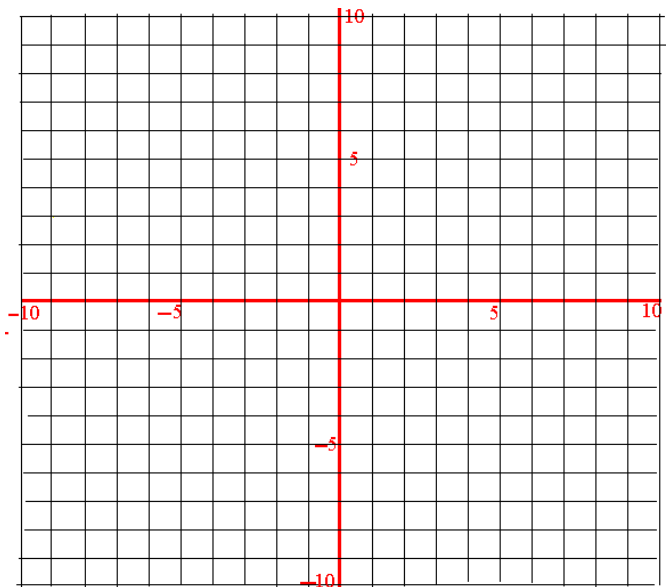
y-intercept: \_\_\_\_\_

Holes: \_\_\_\_\_

Vertical Asymptotes: \_\_\_\_\_ Horizontal Asymptotes: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

End-Behavior:  
\_\_\_\_\_  
\_\_\_\_\_



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

y-intercept: \_\_\_\_\_

Holes: \_\_\_\_\_

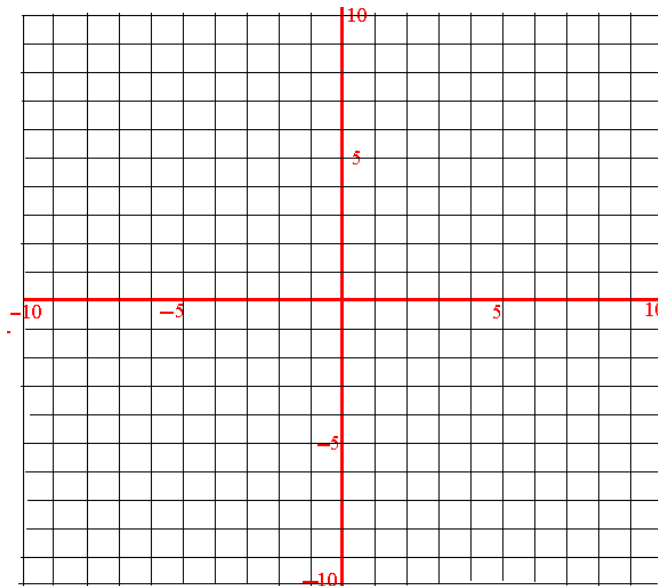
Vertical Asymptotes: \_\_\_\_\_ Horizontal Asymptotes: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

End-Behavior:

\_\_\_\_\_

\_\_\_\_\_



4.)  $k(x) = \frac{x^2 - 16}{x + 4}$

y-intercept: \_\_\_\_\_

Holes: \_\_\_\_\_

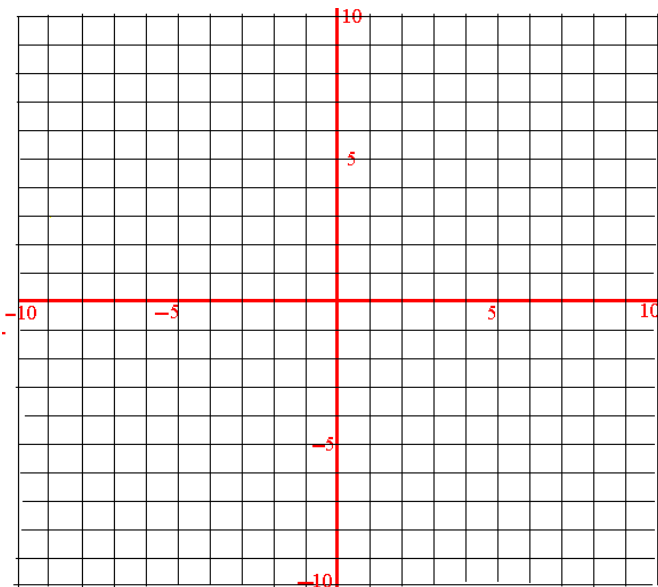
Vertical Asymptotes: \_\_\_\_\_ Horizontal Asymptotes: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

End-Behavior:

\_\_\_\_\_

\_\_\_\_\_



5.)  $g(x) = \frac{-3}{(x-1)(x+6)}$

y-intercept: \_\_\_\_\_

Holes: \_\_\_\_\_

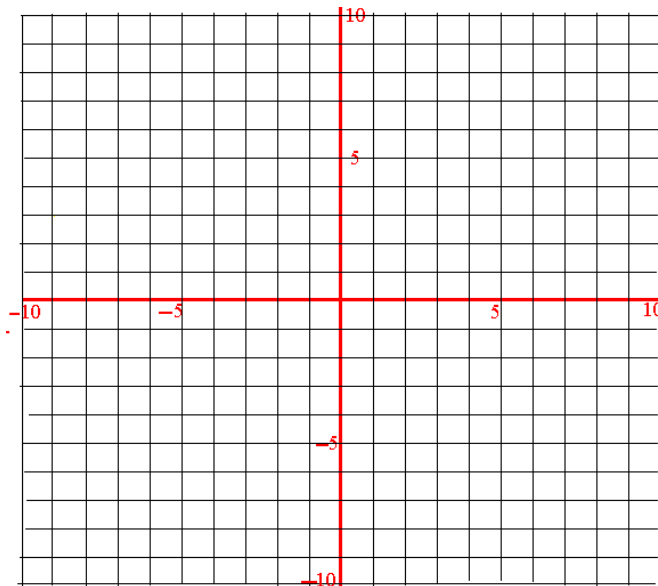
Vertical Asymptotes: \_\_\_\_\_ Horizontal Asymptotes: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

End-Behavior:

\_\_\_\_\_

\_\_\_\_\_



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

y-intercept: \_\_\_\_\_

Holes: \_\_\_\_\_

Vertical Asymptotes: \_\_\_\_\_ Horizontal Asymptotes: \_\_\_\_\_

Domain: \_\_\_\_\_ Range: \_\_\_\_\_

End-Behavior:

\_\_\_\_\_

\_\_\_\_\_

