NAME _____ **Hour** _____

2C.3 WS #3 Graphing Rational Functions

1. Use the rational function $f(x) = \frac{x+2}{x^2-4}$ to complete the following and graph the function. Show all work and label the graph appropriately.

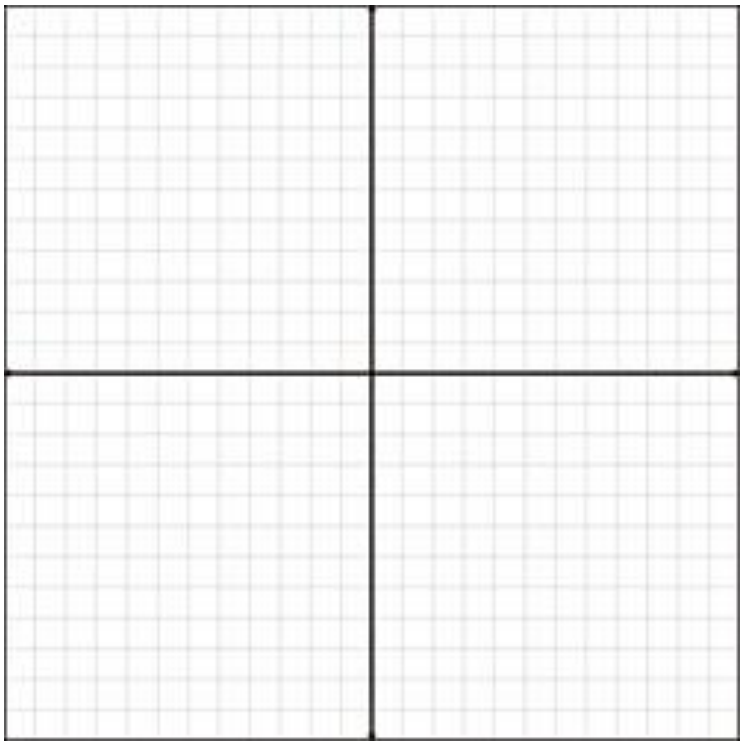
   a. Simplify

   b. Domain

   c. Vertical Asymptote(s):

   d. Horizontal Asymptote:

   e. Slant Asymptote:



   f. x-intercepts

   g. y-intercepts

   h. Additional Points

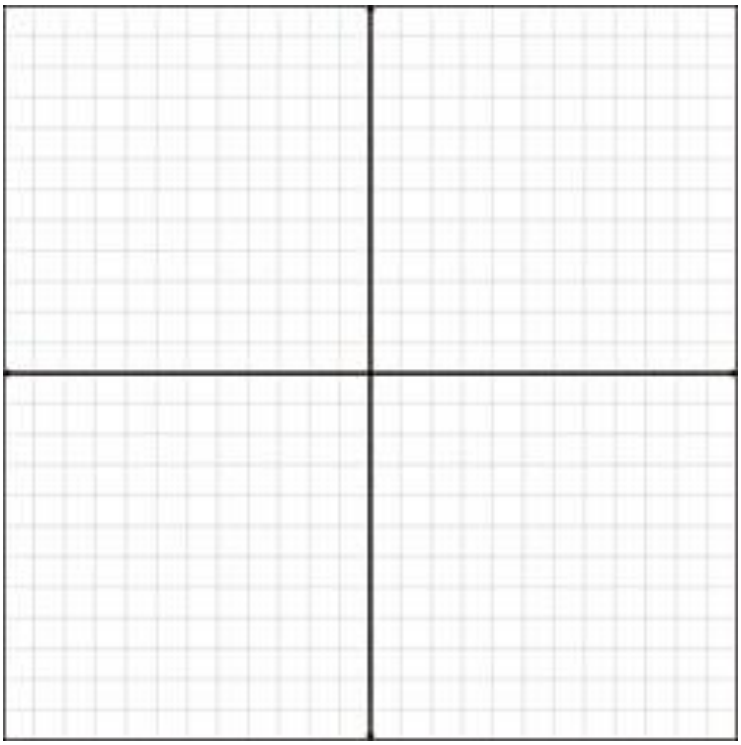
2. Use the rational function $f(x) = \frac{4x-2}{2x+1}$ to complete the following. Show all work and label the graph appropriately.

a. Simplify

b. Domain

c. Vertical Asymptote(s):

d. Horizontal Asymptote:



e. Slant Asymptote:

f. x-intercept(s):

g. y-intercept(s):

h. Additional Points: