Name _____ Date _____ Class _____

LESSON 8-2

Graphing More Complicated Rational Functions

Practice and Problem Solving: A/B

Identify all vertical asymptotes and holes of each rational function. Then state its domain.

1. $f(x) = \dfrac{x-1}{-3x^2+27}$

Vertical Asymptotes: _____

Holes: _____

Domain: _____

2. $f(x) = \dfrac{-x^2-3x+4}{x^2+2x-8}$

Vertical Asymptotes: _____

Holes: _____

Domain: _____

Determine the end behavior of each rational function.

3. $f(x) = \dfrac{x^2-4}{-3x}$

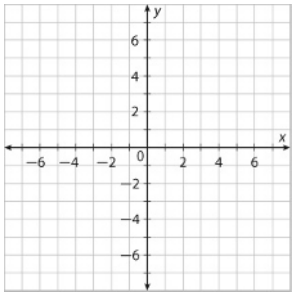
_____

4. $f(x) = \dfrac{x^2+5x+6}{x^2+7x+12}$

_____

Identify the asymptotes, holes, and *x*-intercepts of each rational function. Then graph the function.

5. $f(x) = \dfrac{x+2}{-2x^2-6x}$



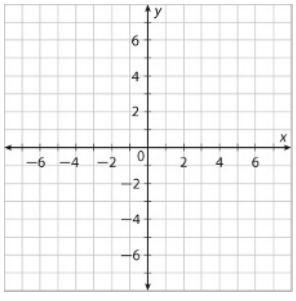
Vertical Asymptotes: _____

Horizontal Asymptotes: _____

Holes: _____

x-intercept(s): _____

6. $f(x) = \dfrac{-x^2+1}{x^2-3x+2}$



Vertical Asymptotes: _____

Horizontal Asymptotes: _____

Holes: _____

x-intercept(s): _____