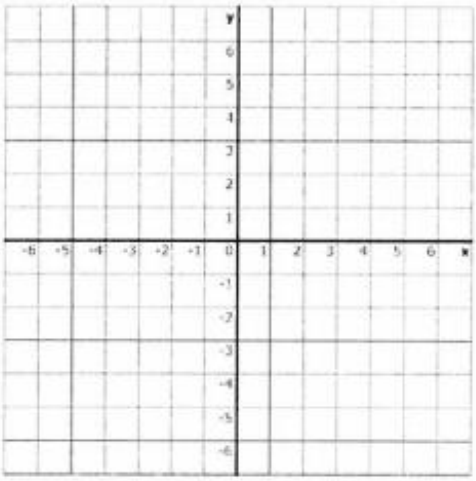
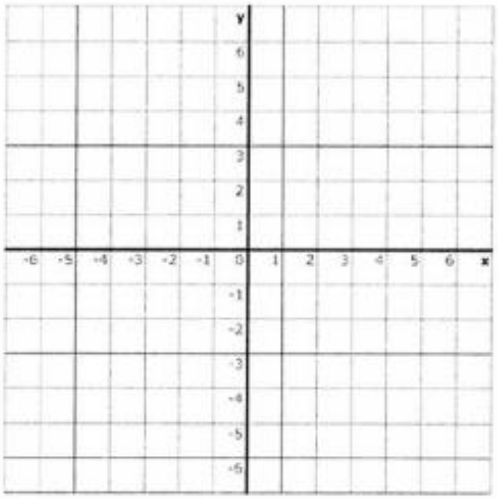
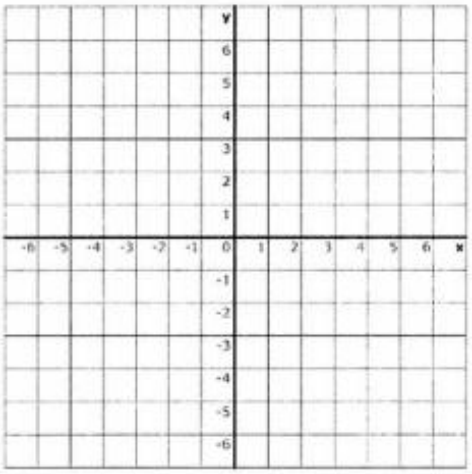
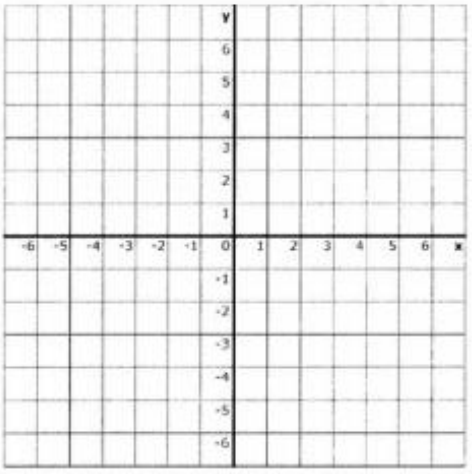
Graphing Rational Functions
PreCalculus

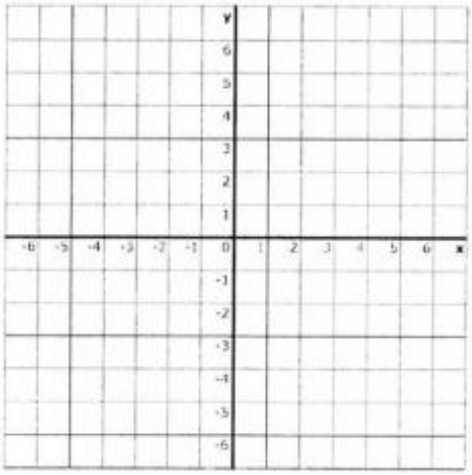
You MUST show work on a separate sheet of paper. Record your findings here.

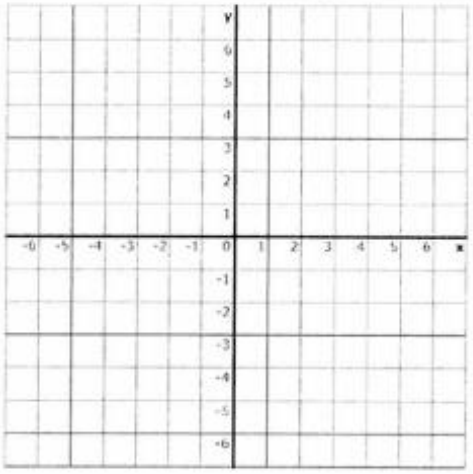
1. $f(x)=\frac{2x-6}{x^2-3x}$	Factored & Simplified:	
Domain Discontinuities:	RDs (points):	
VA(s):	HA:	
x–int(s):	y–int:	
As $x \to -\infty$,	As $x \to \infty$,	
Oblique (slant) Asymptote:		

2. $f(x)=\frac{x^2+3x}{x^2-x}$	Factored & Simplified:	
Domain Discontinuities:	RDs (points):	
VA(s):	HA:	
x–int(s):	y–int:	
As $x \to -\infty$,	As $x \to \infty$,	
Oblique (slant) Asymptote:		

3. $f(x)=\frac{x}{-x-2}$	Factored & Simplified:	
Domain Discontinuities:	RDs (points):	
VA(s):	HA:	
x–int(s):	y–int:	
As $x \to -\infty$,	As $x \to \infty$,	
Oblique (slant) Asymptote:		

4. $f(x)=\frac{-3x^2-12x-9}{x^2+5x+4}$	Factored & Simplified:	
Domain Discontinuities:	RDs (points):	
VA(s):	HA:	
x–int(s):	y–int:	
As $x \to -\infty$,	As $x \to \infty$,	
Oblique (slant) Asymptote:		

5. $f(x)=\dfrac{x^2+x}{-2x^2-2x+12}$	Factored & Simplified:	
Domain Discontinuities:	RDs (points):	
VA(s):	HA:	
x–int(s):	y–int:	
As $x \to -\infty$,	As $x \to \infty$,	
Oblique (slant) Asymptote:		

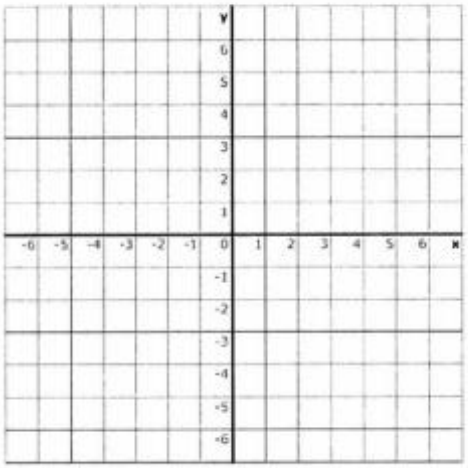
6. $f(x)=\dfrac{x^3-6x^2+8x}{-3x^2+9x-6}$	Factored & Simplified:	
Domain Discontinuities:	RDs (points):	
VA(s):	HA:	
x–int(s):	y–int:	
As $x \to -\infty$,	As $x \to \infty$,	
Oblique (slant) Asymptote:		

7.

$$f(x) = \frac{x^3 - 16x}{-3x^2 + 3x + 18}$$

Factored & Simplified:

Domain Discontinuities:	RDs (points):
VA(s):	HA:
x–int(s):	y–int:
As $x \to -\infty$,	As $x \to \infty$,
Oblique (slant) Asymptote:	



8.

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

Factored & Simplified:

Domain Discontinuities:	RDs (points):
VA(s):	HA:
x–int(s):	y–int:
As $x \to -\infty$,	As $x \to \infty$,
Oblique (slant) Asymptote: