PreCalculus
WS: 2.7

Name_____
Date_____Block_____

*DO NOT USE A GRAPHING CALCULATOR (Except to find your test points and to**CHECK** your answers)*
Match the rational function with its graph.
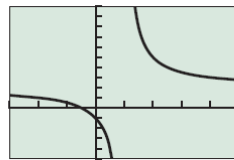*DO NOT USE A GRAPHING CALCULATOR.*

1.____ $f(x) = \dfrac{1}{x-4}$

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

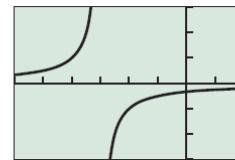**3.**____ $f(x) = \dfrac{2x+1}{x-1}$
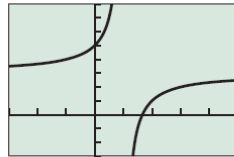
4.____ $f(x) = \dfrac{x+4}{x+3}$

5.____ $f(x) = \dfrac{x-3}{4-x}$
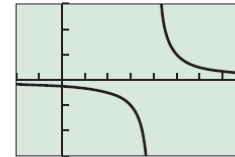
6.____ $f(x) = \dfrac{3x-5}{x-1}$

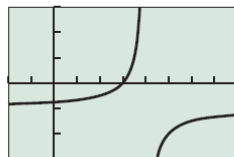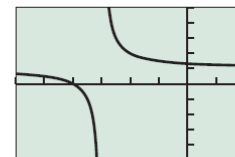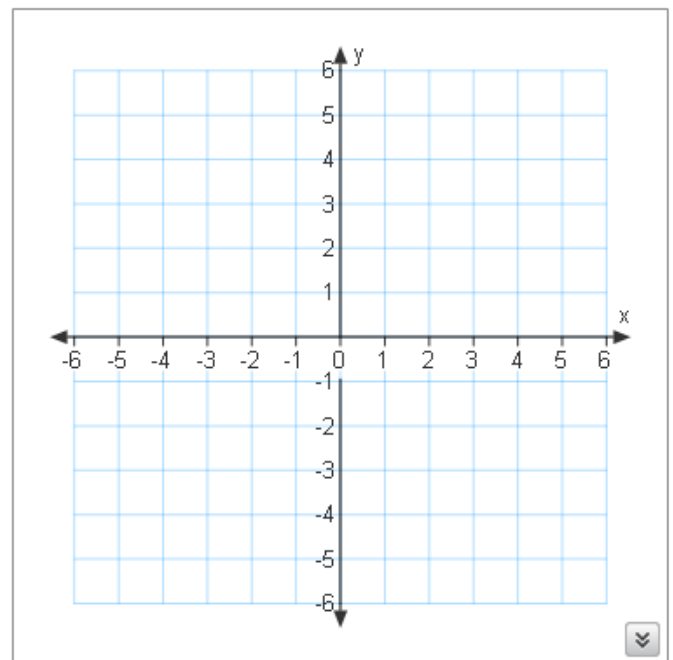(a) (b)

(c) (d)

(e) (f)

Find the following parts of the function: *x*-intercept, *y*-intercept, all asymptotes, domain, range, and hole(s), if applicable. Notice in each example if *N>D*, *N=D* or *N<D*. Then graph the function

7. $f(x) = \dfrac{x-3}{x^2+3x}$
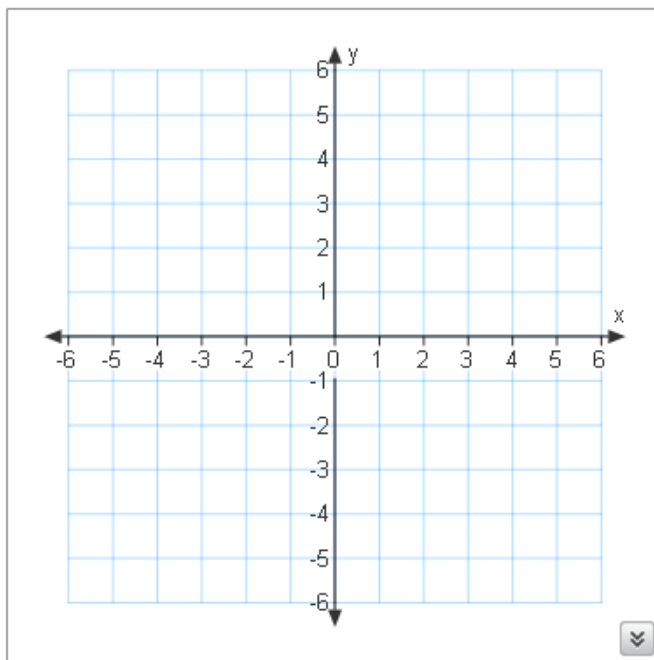
Higher Degree N/D?	
Asymptotes:	
hole(s):	
Domain:	
Range:	
x-int (s):	
y-int:	
Test Points:	

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

Higher Degree N/D?	
Asymptotes:	
hole(s):	
Domain:	
Range:	
x-int (s):	
y-int:	
Test Points:	

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

Higher Degree N/D?	
Asymptotes:	
hole(s):	
Domain:	
Range:	
x-int (s):	
y-int:	
Test Points:	
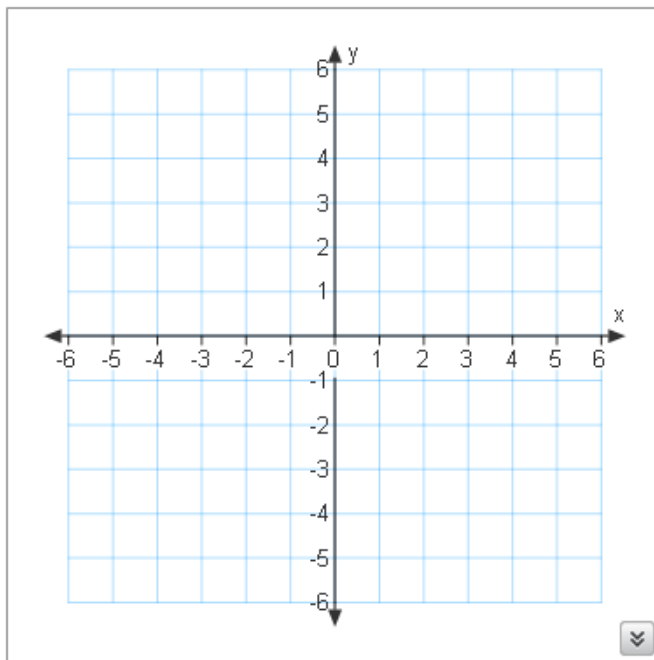
10. $f(x) = \dfrac{x^2}{x-1}$

Higher Degree N/D?	
Asymptotes:	
hole(s):	
Domain:	
Range:	
x-int (s):	
y-int:	
Test Points:	
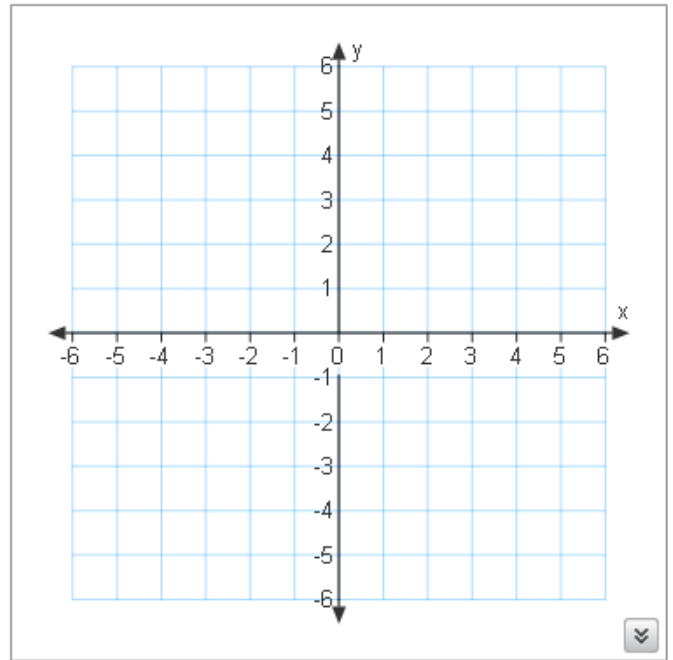
11. $f(x) = \dfrac{2x^2 - 5x + 5}{x-2}$

Higher Degree N/D?	
Asymptotes:	
hole(s):	
Domain:	
Range:	
x-int (s):	
y-int:	
Test Points:	