

# Graphing Rational Functions

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

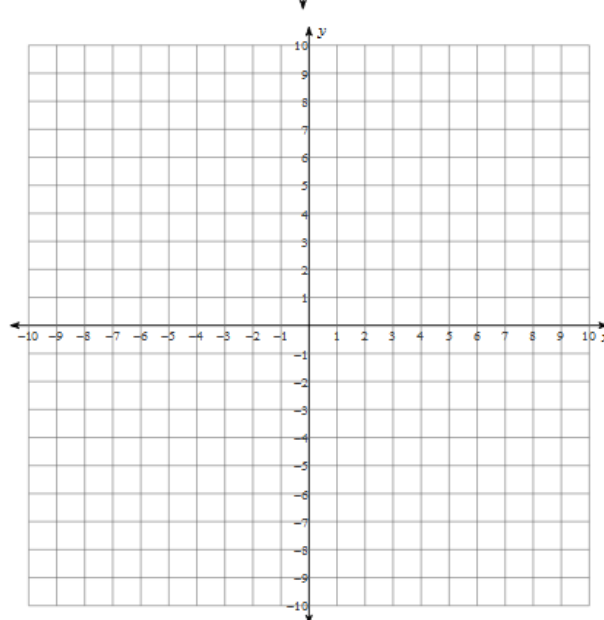
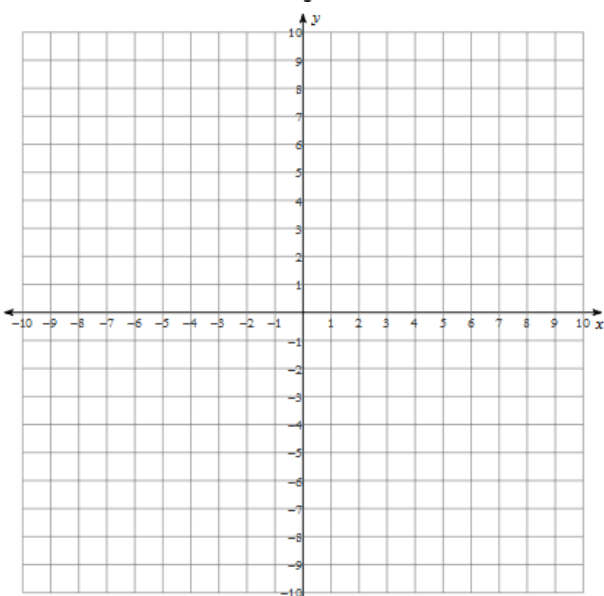
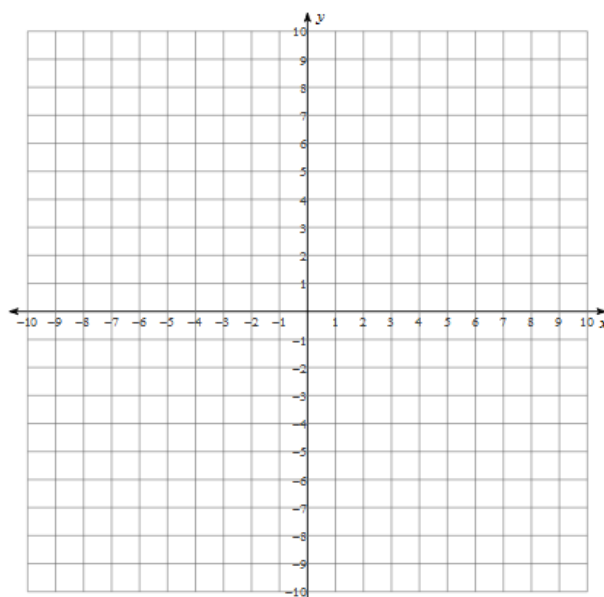
y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	

b.  $f(x) = \frac{(2x-1)(x+3)(x-2)}{(x+4)(x-2)(x-1)}$

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	

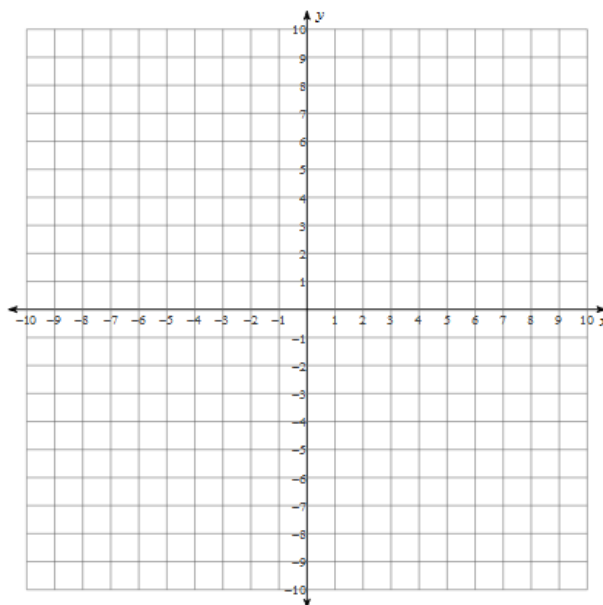
c.  $f(x) = \frac{x-1}{x^2 - x - 6}$

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	



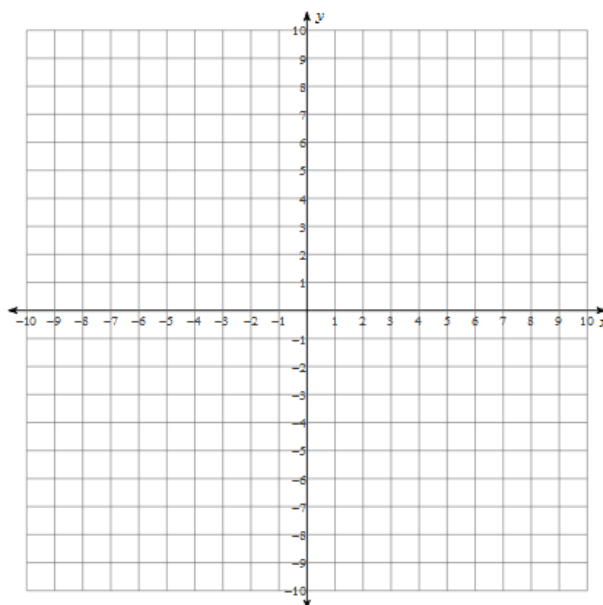
d.  $f(x) = \frac{-x^2 + 3x}{x^2 + x - 20}$

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	



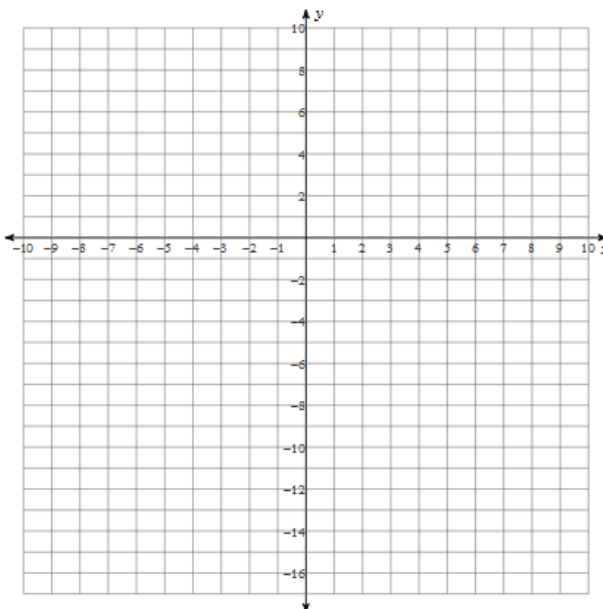
e.  $f(x) = \frac{(x-1)(x+1)(x-3)}{(x-3)(x-4)(x+5)}$

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	



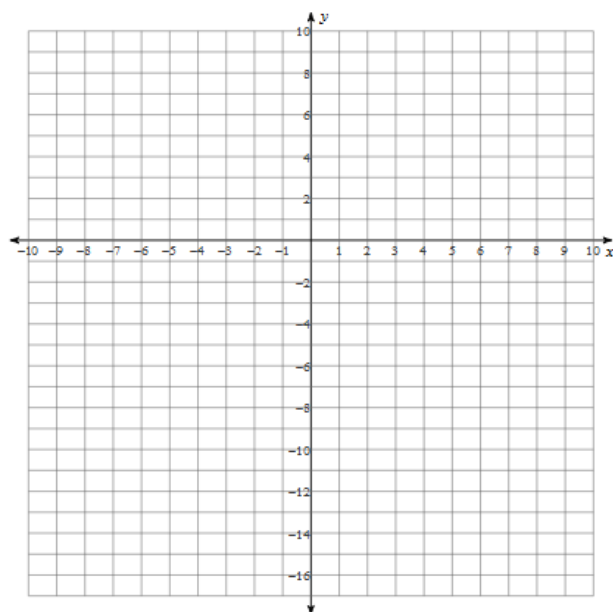
f.  $f(x) = \frac{-x^2 + x + 12}{x-3}$

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	



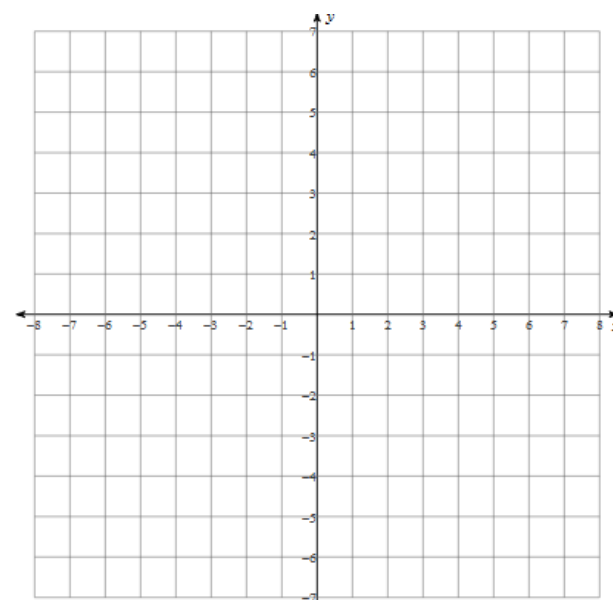
g.  $f(x) = \frac{x^3 + x^2 - 2x}{x^2 + 2x - 3}$

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	



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

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	



i.  $f(x) = \frac{x^3 - 2x^2 - 8x}{3x^2 - 3x - 6}$

y-intercept	
x-intercept(s)	
Vertical Asymptote(s)	
Point(s) of Discontinuity	
Horizontal Asymptote	
Oblique Asymptote	

