Steps to Graphing Rational Functions:

1. **FACTOR! Cancel any terms →**

2. **Vertical Asymptotes →**

Behavior		
	Description	Example
Odd Degree		
Even Degree		

3. **Horizontal Asymptotes or Oblique Asymptotes →**

	Description	Example
a. Numerator and Denominator Same Degree		
b. Denominator Greater Degree		
c. Numerator Greater Degree		

4. **Y-Intercept →**

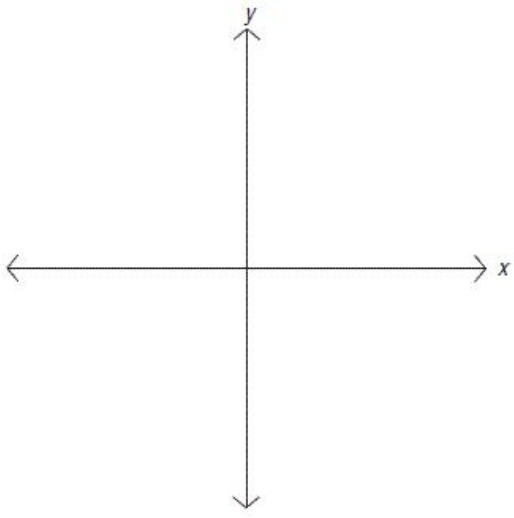
5. **X-Intercept →**

Behavior		
	Description	Example
Odd Degree	Cross x-axis	
Even Degree	Bounce off x-axis	

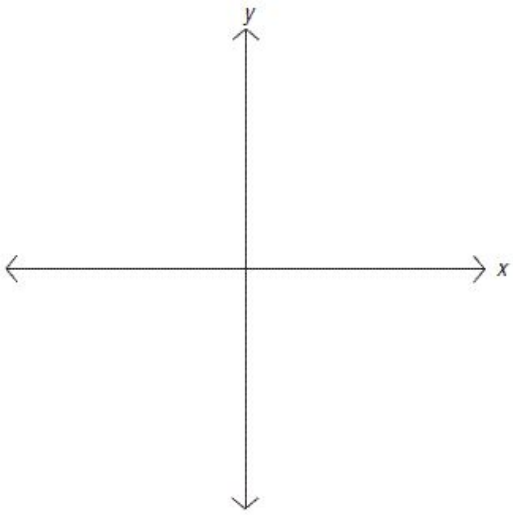
6. **Plot Any Extra Points**

Graph:

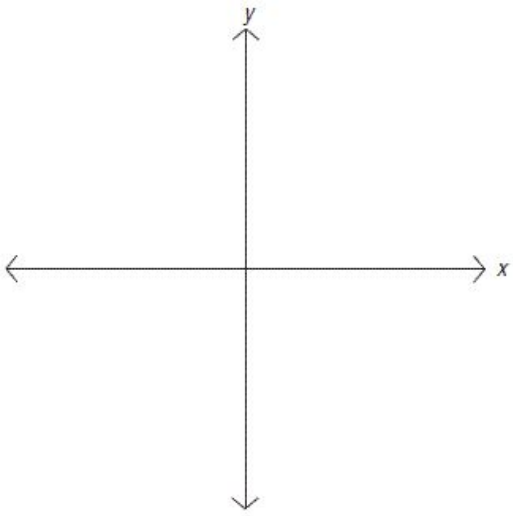
I. $f(x) = \frac{2x+1}{x^2+6x+8}$



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



III. $f(x) = \frac{x^2-16}{x+4}$



IV. $f(x) = \frac{x^2+2x}{2x-1}$