

8.08 Graphing Rational Functions

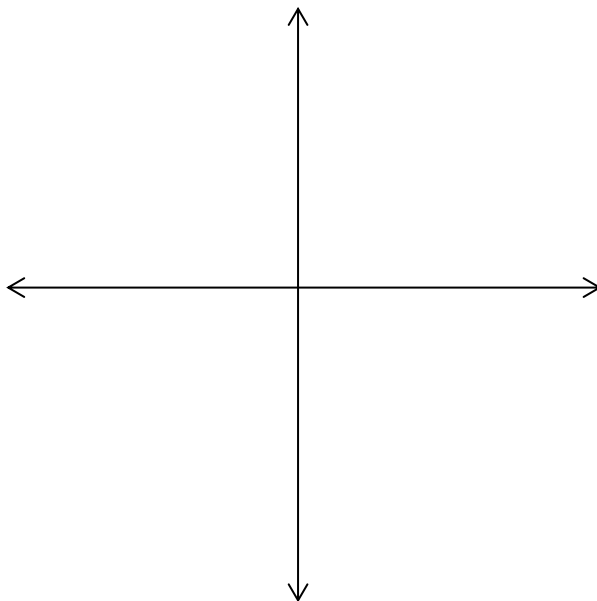
Name _____

For each function below,

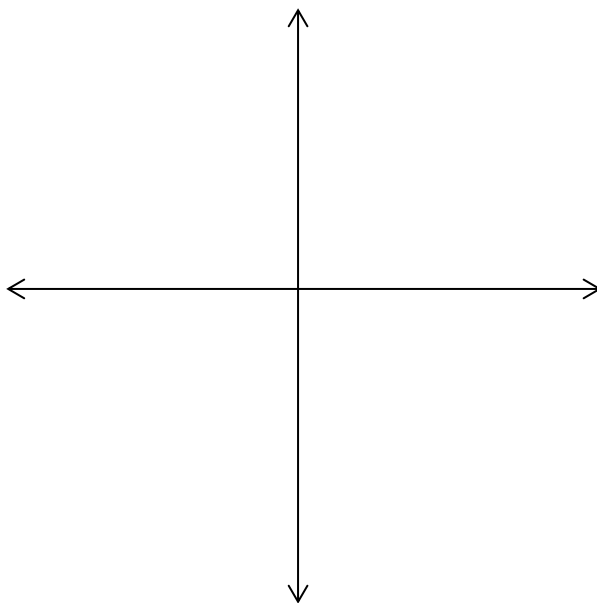
- Identify any holes;
- identify and plot the appropriate asymptotes;
- Identify and plot the intercepts;
- Sketch the branches of the graph according to the work above. If necessary, be sure to include a hole where there should be one, including its y-value to give its precise location.

Show your work.

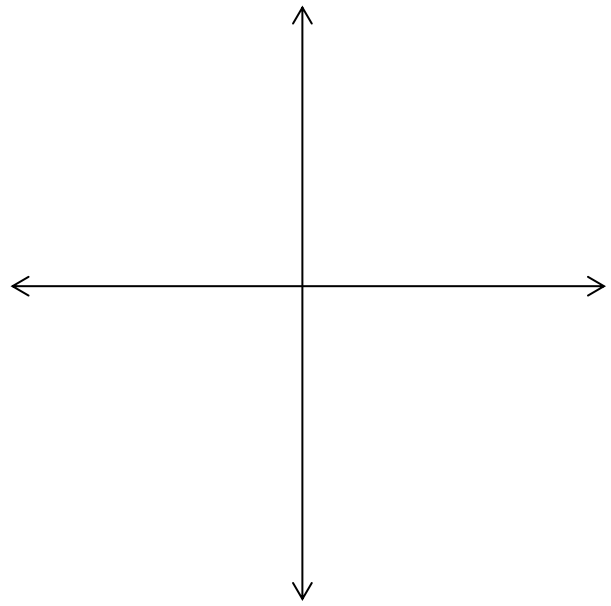
$$\frac{x^2 - x - 6}{x^2 - 2x - 3}$$



$$\frac{x^2 + 6x + 8}{x^2 - x - 6}$$



$$\frac{x^3 - 2x^2 - 9x + 18}{x - 3}$$



$$\frac{x^3 + 5x^2 - x - 5}{x^2 - 2x - 3}$$

