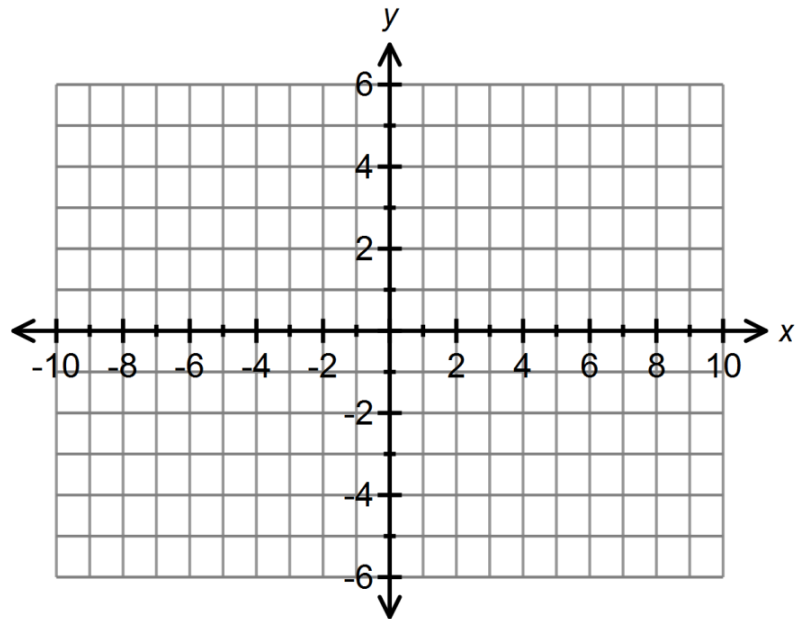


Worksheet 1: Graph a Rational Function

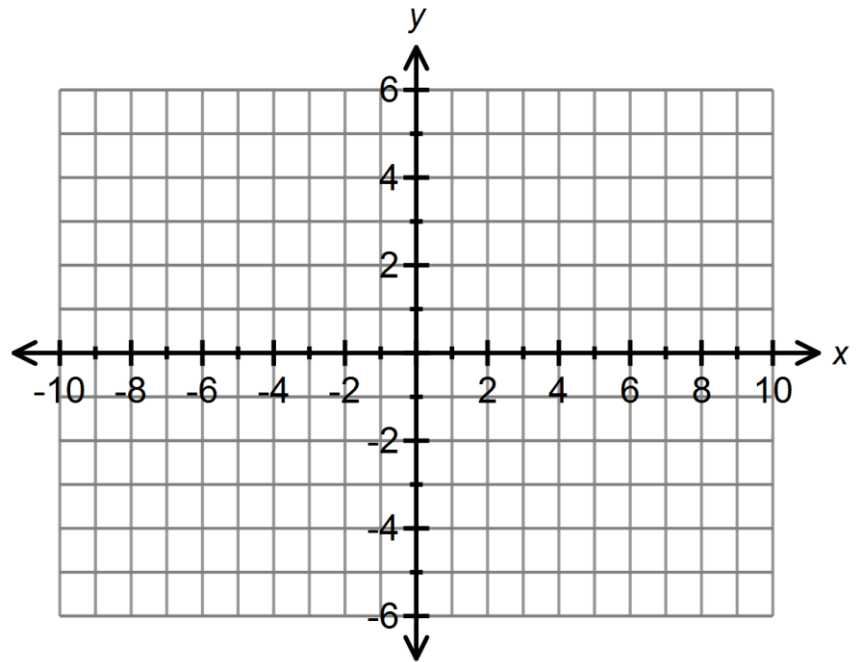
1. Sketch the following graph using intercepts, asymptotes, point of discontinuity, limits, sign diagram and test points.

$$y = \frac{2x^2 - 5x - 3}{x^2 - 3x - 4}$$



2. Sketch the following graph using intercepts, asymptotes, point of discontinuity, limits, sign diagram and test points.

$$y = \frac{x^2 + x - 6}{-4x^2 - 16x - 12}$$



3. Sketch the following graph using intercepts, asymptotes, point of discontinuity, limits, sign diagram and test points.

$$y = \frac{x^3 + x^2 - 4x - 4}{x^2 + 5x + 4}$$

