

Aim: How do we graph rational functions with slant asymptotes? (Day 2)**I. Do Now:**

1. Find all horizontal, vertical, and slant asymptotes.

(a) $f(x) = \frac{2}{x+3}$

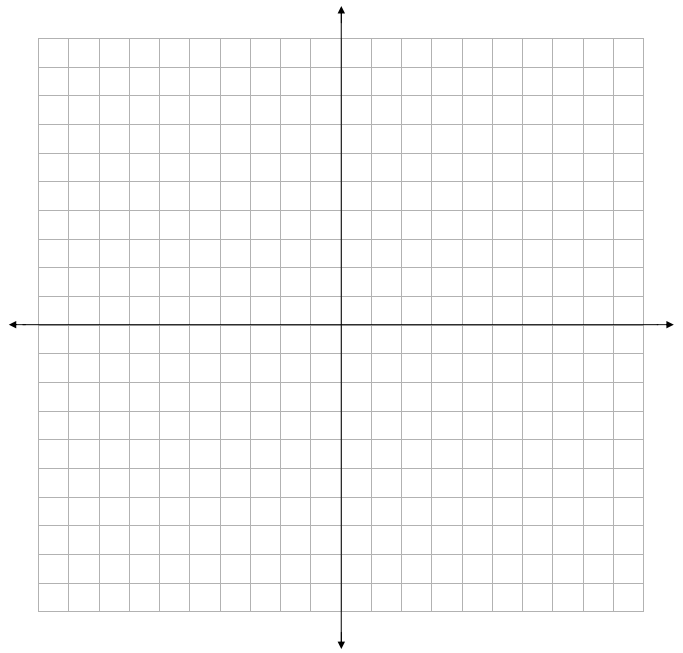
(b) $g(x) = \frac{x^2 - 4}{x^2 - 9}$

(c) $h(x) = \frac{x^2}{x-1}$

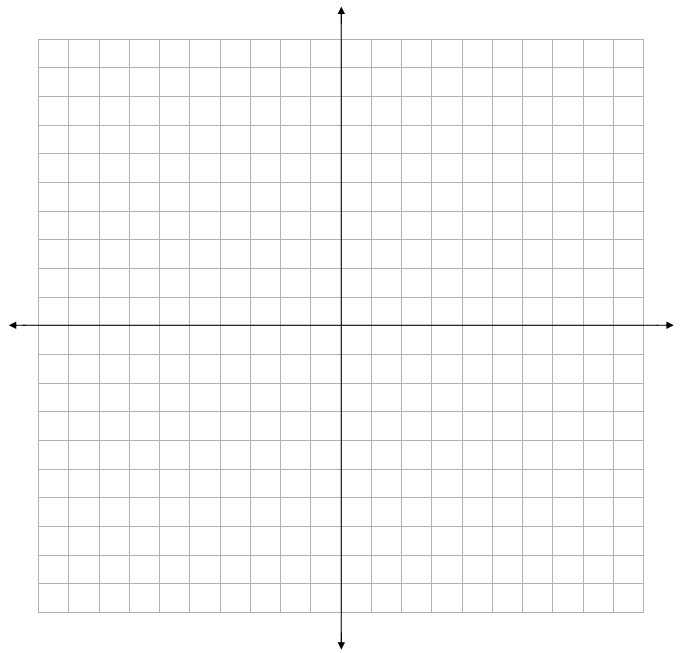
(d) $h(x) = \frac{x^2 + 5x + 8}{x+2}$

II. Analyze and Graph:

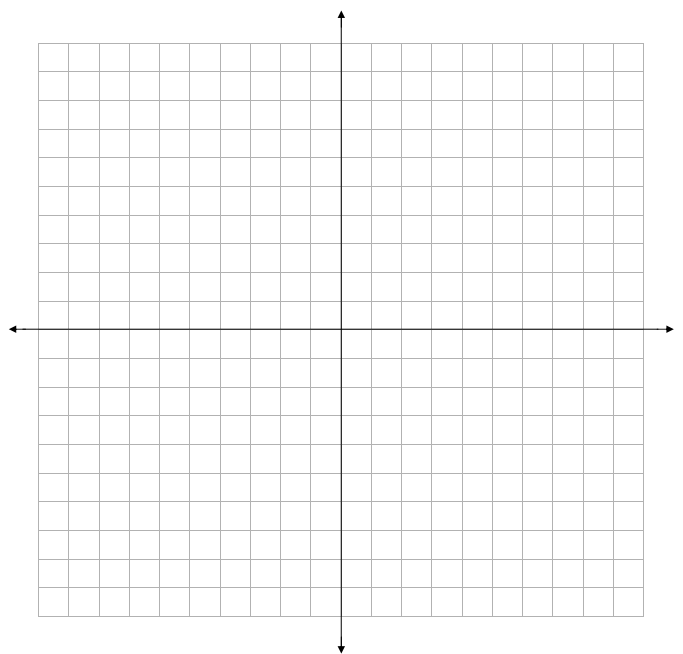
2. $h(x) = \frac{x^2 + 5x + 8}{x+2}$



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



4. $h(x) = \frac{x^3 - 1}{x^2 - 4}$

**HW40**

• p. 158: 52, 56 (use graph paper)

• p. 158: 96

• Sketch the graph of: $f(x) = \frac{x^2 - x + 1}{x-1}$

• p. 160: 98a*