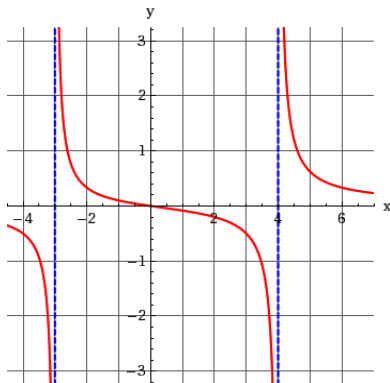
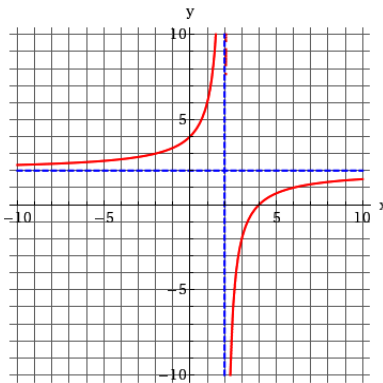


Group #: _____ Name: _____

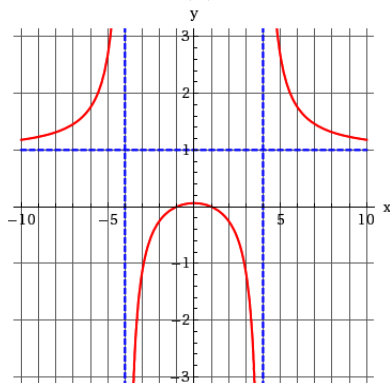
1. (10 points each) For each of the following graphs, find the x -intercept(s), y -intercept(s), horizontal, and vertical asymptotes.



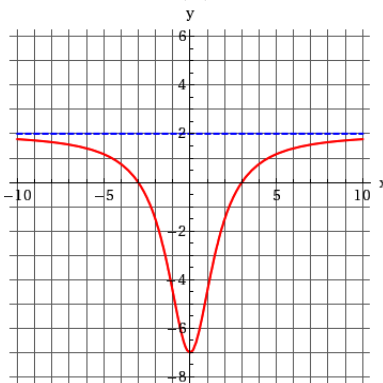
(a)



(b)



(c)



(d)

2. (20 points each) Find all horizontal and vertical asymptotes (if any). If there are no horizontal or vertical asymptotes, say so.

(a) $r(x) = \frac{2x - 3}{x^2 - 1}$

(b) $r(x) = \frac{x^3 + 3x^2}{3x^2 - 13x + 4}$

(c) $r(x) = \frac{5x^2 + 4x - 1}{3x^2 + 5x - 2}$