Advanced Math

Z-(Day

Rational Functions and Asymptotes

Asymptote Rules

given the rational function
$$f(x) = \frac{p(x)}{q(x)}$$

vertical asymptotes:

hole:

horizontal asymptotes:

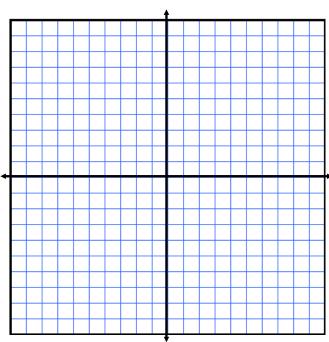
a:

b:

c:

Sketch the graph of the rational function. As sketching aids, use zeros, y-intercepts, vertical asymptotes, horizontal asymptotes, and symmetry.

37)
$$C(x) = \frac{5+2x}{1+x}$$



Sketch the graph of the rational function. As sketching aids, use zeros, y-intercepts, vertical asymptotes, horizontal asymptotes, and symmetry.

49)
$$C(x) = \frac{3x}{x^2 - x - 2}$$

