

Mail this assignment with your homework using snail mail

**Pop Test Rational Functions 11.5**

\_\_\_\_\_ name

1. Sketch a graph of a function with the following properties:

vertical asymptotes at:  $x = 2, x = 3$

horizontal asymptotes at:  $y = 1$

x intercepts at  $(-2, 0), (1, 0)$

y intercept at  $(0, \frac{-1}{3})$

$f(x)$  is positive for  $x$  values  $x \in (1, 2)$ ; graph crosses the horizontal asymptote

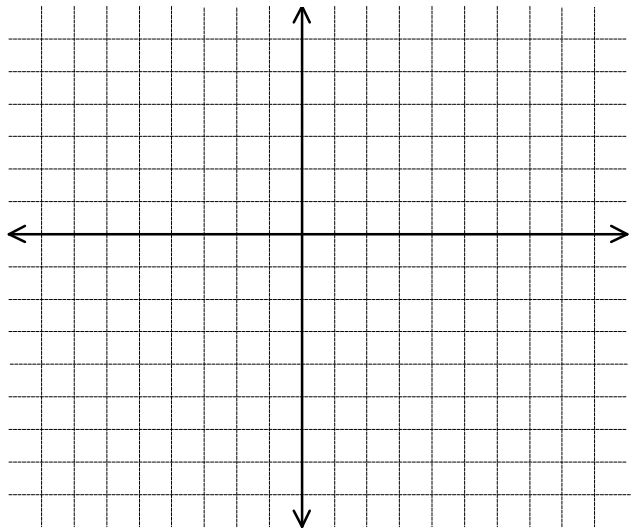
$f(x)$  is positive for  $x \in (3, +\infty)$

$f(x)$  is negative for  $x \in (-2, 1)$

$f(x)$  is positive for  $x \in (-\infty, -1)$  graph does not cross the horizontal asymptote

$f(x)$  is negative for  $x \in (-2, +3)$

relative maximum at approximately  $(2.3, -25.64)$



2. Write the equation of the graph you just drew: \_\_\_\_\_