

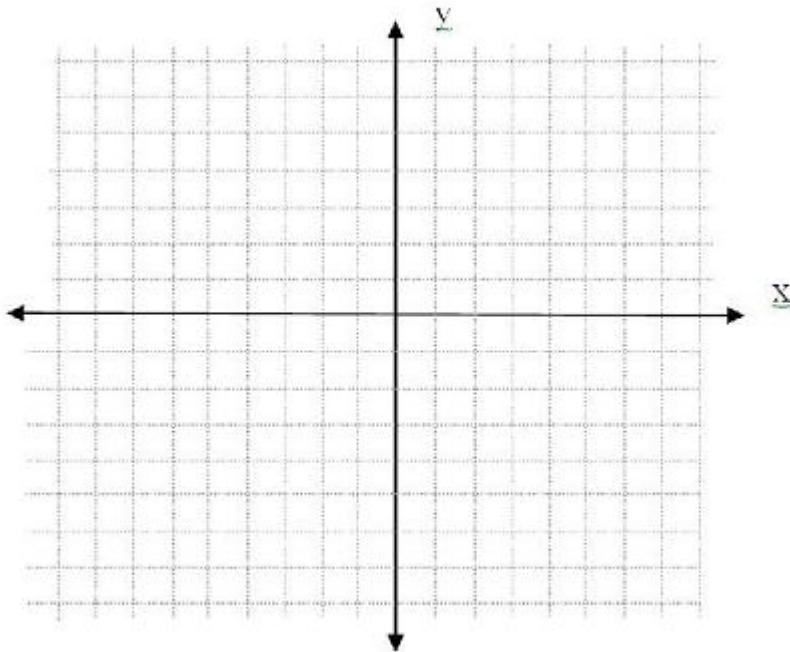
Name:

MATH 121-002, MARCH 31, 2010,

QUIZ 6

Do not omit scratch work. I need to see all steps. Skipping details will result in a loss of credit. Thanks and enjoy. Remember, no graphing calculators permitted.

Problem 1 [50pts] Simplify the rational function $f(x) = \frac{1}{x-2} + \frac{1}{x+2}$ and construct the sign-chart. Use the sign-chart to help graph $y = f(x)$. Make sure to label all the vertical asymptotes and zeros.



Problem 5 [25pts] Find the domain and range of $f(x) = \ln(x) + 2$.

Problem 12 [75pts] Find the inverse function of $f(x) = 3 + 4^x$. Graph both $f(x)$ and $f^{-1}(x)$ on the graph provided.

