

NAME:

Quiz 5 [25 pts]. June 21, 2007

Math 0115 Sec 0101 Summer 2007

1. Using the rational function $f(x) = \frac{x^2 - 4x + 5}{x^2(x - 3)}$, answer the following:

[5 pts] 1. What are the vertical asymptotes, if any?

[5 pts] 2. What are the horizontal asymptotes, if any?

[5 pts] 3. What are the y -intercept and x -intercepts, if any?

[10 pts] 4. The figure below contains the graphs of: $y = 2^x + 2$, $y = 2^{-x}$, $y = 3^{-x}$, and $y = e^x$. Label each graph correctly (either by naming the color or by unambiguously marking the graph).

