

**Math 120 C, E****Quiz 3****October 28, 2004**

Show all work for full credit.

1. (5 points) Write the multipart rule for the function

$$g(x) = |x^2 - 4|.$$

2. (5 points) Write the multipart rule for the function

$$f(t) = u\left(\frac{t}{2}\right) + u\left(\frac{t}{3}\right)$$

where  $u(t)$  is the basic step function,

$$u(t) = \begin{cases} 0 & \text{if } t < 0, \\ 1 & \text{if } 0 \leq t \leq 1, \\ 0 & \text{if } t > 1. \end{cases}$$