

MA 120-04  
§2.1 – 2.2

## Quiz #2

score

Name: \_\_\_\_\_

3 February 2003

1. If values for  $f(x)$  are given in the following table, estimate the value  $f'(5)$  from the data. Explain. (6 points)

$x$	5	10	15	20
$f(x)$	2.1	3.5	8.0	11.1

2. Estimate the instantaneous rate of change of the function  $f(x) = 2^x$  when  $x = 2$  (i.e., estimate  $f'(2)$ ) by calculating the average rate of change over small intervals around  $x = 2$ . Explain what you do. (7 points)

3. Estimate the derivative of the function graphed to the right at  $x = 2$ . Sketch a graph of the derivative of the function on the same set of axes. (7 points)

