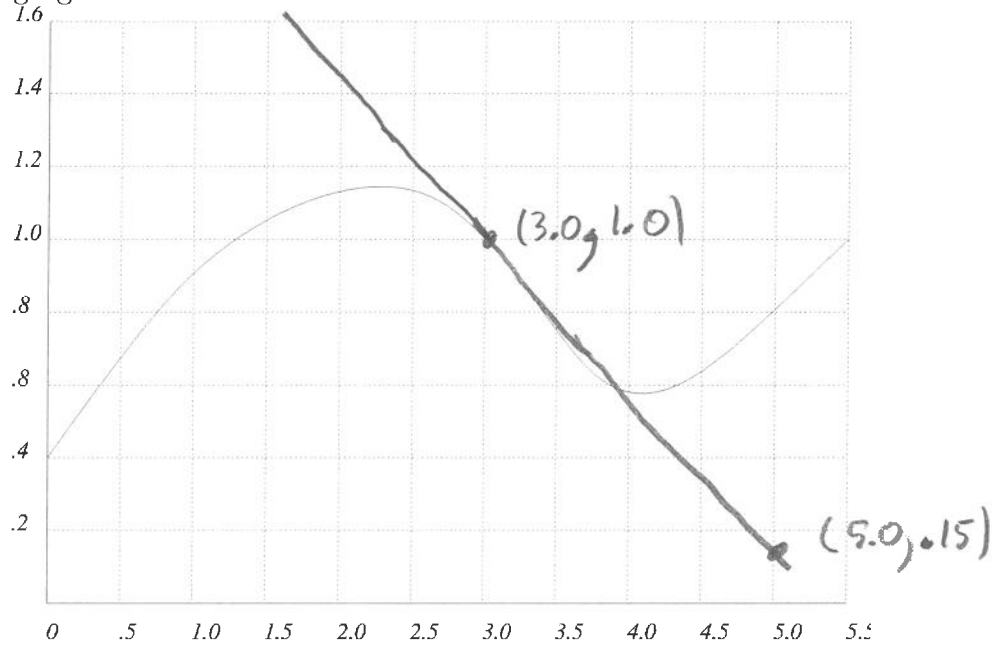
Mathematics 122

Quiz 8 Name: Key

You must show your work to get full credit.

1. In the following figure



(a) Draw the tangent line at the point where $x = 3$.

(b) Estimate $f'(3)$ by choosing two points on the tangent line using them to find the slope.

$f'(3)$ = slope of tangent line

$= \frac{\text{rise}}{\text{run}}$

$= \frac{.15 - 1.0}{5.0 - 3.0} = -.425$

$f'(3) \approx -.425$

(Your answer may differ by a bit.)

2. The following is the graph of $y = g(x)$. Draw the graph of the derivative $y = g'(x)$ on the same axis.