

Math 134

Quiz 1 Sample

January 26, 2011

You may use your calculator. Indicate any calculations you do with the calculator and show your algebra whenever calculations are done by hand.

1. Find the general anti-derivative for each of the following functions:

(a) $h(t)$ for $h'(t) = x^2 + \cos(2x)$.

(b) $g(s)$ for $g'(s) = \frac{1}{s} + \frac{3}{s^2}$.

2. Suppose that $r(y) = \frac{1}{1+y^2}$. Find a function $R(y)$ that satisfies $R'(y) = r(y)$ and $R(1) = 1$.

3. Suppose that $s(z) = \sin(2z)$. Find a function $S(z)$ that satisfies $S''(z) = s(z)$, $S'(0) = 0$ and $S(0) = 1$.