

**Math 134**  
Quiz 4 Sample  
February 15, 2011

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

For each of the following indefinite integrals, state which technique ( $u$  substitution, integration by parts, trigonometric identities, or partial fractions) you should use to evaluate the integral. Then apply the chosen method to evaluate the integral.

1.

$$\int \cos^2(17z) dz$$

2.

$$\int r^3 \ln(3r) dr$$

3.

$$\int \frac{x}{(x-2)(x-3)} dx$$

4.

$$\int \sec^3(q) \tan(q) dq$$