Discovery Project Rubric  
Math 102 Fall 2006

Here are the components that will go into the assessment of your discovery project write up.

Mastery:
a. Correctly evaluates the integral.
b. Shows clearly the steps taken in evaluating the integral.
c. Explains why one would take this approach – describes a logical reason for using this technique.
d. For any formulas that are used, shows how these formulas come about. Traces back any trig formulas used to $\sin^2 x + \cos^2 x = 1$ or to the addition formulas:

\[
\begin{align*}
\sin(x +/ - y) &= \sin(x) \cos(y) +/ - \cos(x) \sin(y) \\
\cos(x +/ - y) &= \cos(x) \cos(y) -/+ \sin(x) \sin(y)
\end{align*}
\]

Near Mastery:
a. Correctly evaluates the integral.
b. Shows clearly the steps taken in evaluating the integral.
Partial answers to (c ) and/or (d) are given but they are not complete.

Tentative:
a. Correctly evaluates the integral.
b. Explanation of steps taken in evaluating the integral is not clear; perhaps some of the steps are left out.
Answers to (c ) and/or (d) are missing major components.

Unsure:
a. Integral not evaluated correctly.
b. In showing how to evaluate the integral, steps are left out or not explained.
c. Does not include an explanation of why this approach is reasonable.
d. Does not justify (i.e. show where they come from) the trig formulas being used.