Math 132, Symbolics Test
Fall 2005

Name: ______________________

Section: ______________________

ID number: _________________

• No papers, notes or calculator may be used.
• Please don’t just give an answer. Clearly explain how you get it.
• This is a 1hr 30min exam.

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<th>Problem</th>
<th>Grade</th>
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1) [10 points] Evaluate

\[ \int \left( 4x^5 + 3e^{4x} - \sqrt{x} + 7\sec^2(x) - 33 \right) dx \]
2) [10 points] Evaluate

\[ \int \tan^2(x) \sec^2(x) dx \]
3) [10 points] Evaluate

\[ \int \frac{e^x}{5 + e^x} \, dx \]
4) [10 points] Evaluate
\[ \int \sqrt{x} \ln(x) \, dx \]
5) [10 points] Evaluate

\[ \int x \sec^2(x) \, dx \]
6) [10 points] Evaluate

\[ \int \sin^2(x) \cos^3(x) \, dx \]
7) [10 points] Evaluate

\[ \int \sin^2(x) \cos^2(x) \, dx \]
8) [10 points] Evaluate

\[ \int x^3 \sqrt{x^2 + 1} \, dx \]
9) Evaluate

\[ \int x^5 \sqrt{25 - x^2} \, dx \]