Worksheet 7. The last worksheet.
Calculus I
Spring 2006

MA113

Answer the following questions. Display your answers clearly and neatly. Explain your reasoning. Use complete sentences.

1. Stewart, page 373 #2a)b)c).

2. Consider the integral \( \int_{a}^{b} \sin(x) \, dx \) as \( a \) and \( b \) vary. What is the largest possible value for this integral? Write a sentence or two to explain why you think your answer is correct.

3. Find all functions which satisfy

\[
\int_{0}^{x} f(t) \, dt = 2f(x)^2.
\]

Hint: Differentiate both sides of this equation. What can you say about \( f' \)?

Tutoring and review sessions

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Monday, 17 April 2006</td>
<td>6–9pm</td>
<td>Tutoring</td>
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<tr>
<td>Monday, 24 April 2006</td>
<td>6–9pm</td>
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<td>Review session</td>
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April 12, 2006