MATH 106D - CALCULUS II
WINTER 2005

QUIZ 2

NAME:
Show ALL your work CAREFULLY.

(a) Use long division and the method of partial fractions to evaluate
\[ \int \frac{2x^3 + 6x^2 + 4x + 1}{x^2 + 3x + 2} \, dx. \]

(b) Consider the following given data of a function \( f(x) \) on the interval \([0, 4]\).

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( f(x) )</td>
<td>1</td>
<td>5</td>
<td>17</td>
</tr>
</tbody>
</table>

Find TRAP(2) AND MID(1). Here the notation \((n)\) indicates that the interval \([0, 4]\) is to be divided into \(n\) equal subintervals.

Date: January 21, 2005.