4. [7 points] Below is a table showing some values of an invertible and differentiable function \( m \).

<table>
<thead>
<tr>
<th>( t )</th>
<th>(-0.11)</th>
<th>(-0.03)</th>
<th>(0)</th>
<th>(0.02)</th>
<th>(0.5)</th>
<th>(0.98)</th>
<th>(1)</th>
<th>(1.06)</th>
<th>(1.12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( m(t) )</td>
<td>1.548</td>
<td>1.423</td>
<td>1.000</td>
<td>0.721</td>
<td>0</td>
<td>(-2.367)</td>
<td>(-2.441)</td>
<td>(-2.675)</td>
<td>(-2.913)</td>
</tr>
</tbody>
</table>

Find the value of each of the quantities below. If it is not possible to find the value exactly, find the best estimate you can given all of the information provided above.

a. [1 point] \( \lim_{t \to 0} m(t) \)

Answer: 

b. [2 points] \( (m^{-1})'(1) \)

Answer: 

c. [1 point] \( \lim_{u \to 0} \frac{m(1 + u) - m(1)}{u} \)

Answer: 

Below is a table showing some values of another differentiable function \( n \).

Assume that \( n'(t) \) is continuous on the interval \([-0.1, 1.1]\).

<table>
<thead>
<tr>
<th>( t )</th>
<th>(-0.1)</th>
<th>(0)</th>
<th>(0.1)</th>
<th>(0.9)</th>
<th>(1)</th>
<th>(1.1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( n(t) )</td>
<td>2</td>
<td>(-8)</td>
<td>5</td>
<td>2</td>
<td>(-2)</td>
<td>3</td>
</tr>
</tbody>
</table>

Find the exact value of each of the quantities below. If it is not possible to find the value exactly, write NOT POSSIBLE.

d. [1 point] The average rate of change of \( n(t) \) on the interval \([-0.1, 1.1] \)

Answer: 

e. [1 point] \( \int_{0}^{1} n'(t) dt \)

Answer: 

f. [1 point] \( \int_{0}^{1} n(t) dt \)

Answer: 