2. [4 points] Three functions, \( \ell(x) \), \( q(x) \), \( p(x) \) are graphed below.

These functions satisfy the following properties:
- The function \( \ell(x) \) is linear with slope \(-\frac{1}{2}\).
- The function \( p(x) \) is exponential.
- The function \( q(x) \) is quadratic with one \( x \)-intercept at \( x = 0 \) and the other at \( x = r \).
- The graphs of \( q(x) \) and \( \ell(x) \) intersect once at the point \( \left( \frac{2}{3}, \frac{2}{3} \right) \), and again at \( x = r \).

Write the correct number in each blank. Your answers should be exact and should not include any letters.

(i) The average rate of change of \( q(x) \) between \( x = \frac{2}{3} \) and \( x = r \) is ________________

(ii) \( r = \) ________________

(iii) \( p(0) = \) ________________

(iv) \( \lim_{x \to -\infty} p(x) = \) ________________

3. [3 points] The following table gives values of the variables \( A \), \( B \) and \( C \):

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>( A )</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>( B )</td>
<td>-3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>( C )</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

Circle all of the following that could be true.

- \( A \) is a function of \( B \).
- \( C \) is a function of \( A \).
- \( B \) is a function of \( C \).
- None of these.