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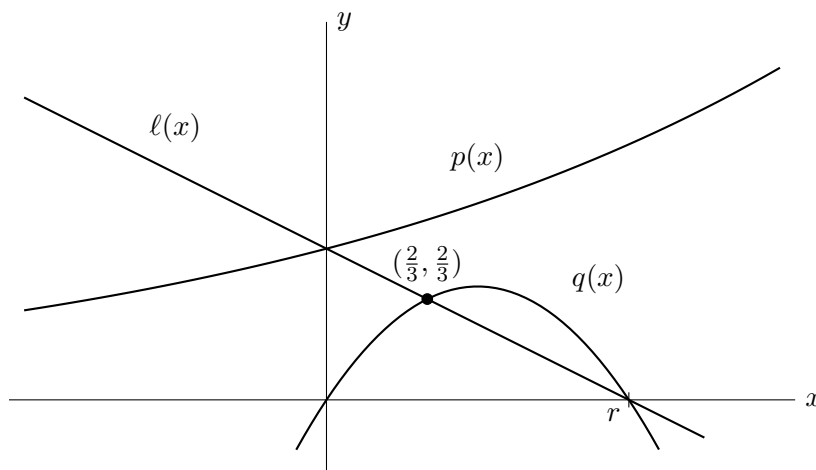

These functions satisfy the following properties:

- 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 $(\frac{2}{3}, \frac{2}{3})$, 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) $\displaystyle\lim_{x \to -\infty} p(x) =$ _____

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

A	1	2	1	4
B	-3	0	2	1
C	7	6	5	4

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.