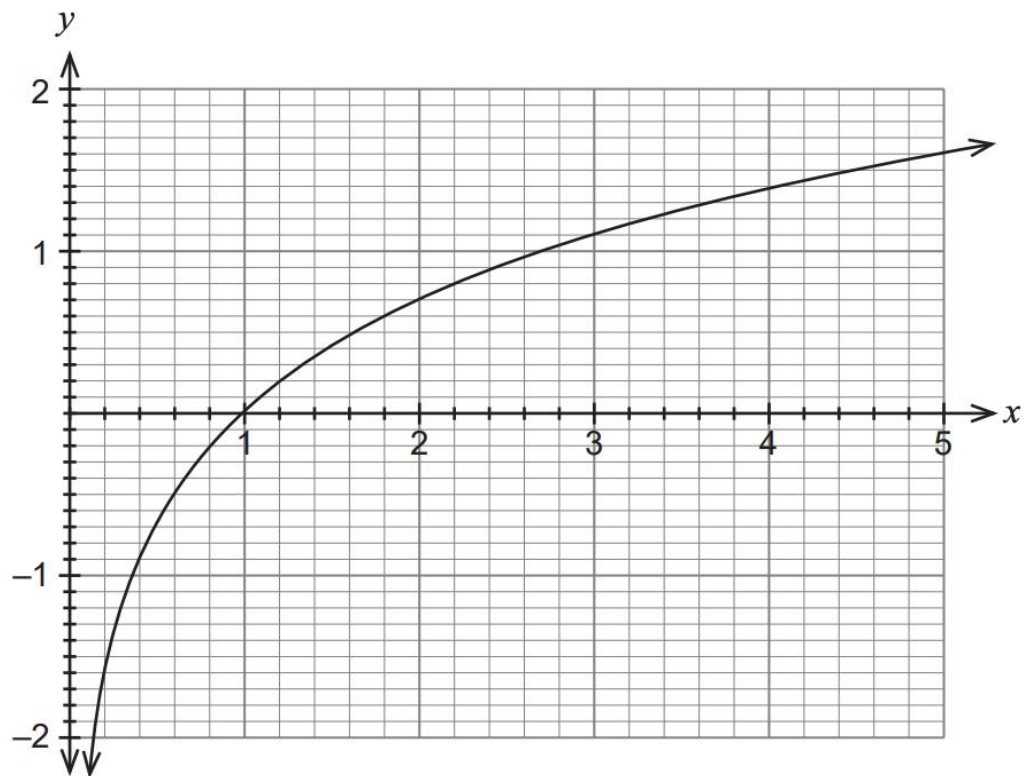


**Question 4****(6 marks)**

Consider the graph of  $y = \ln(x)$  shown below.



(a) Use the graph to estimate the value of  $p$  in each of the following.

(i)  $1.4 = \ln(p)$  (1 mark)

(ii)  $e^{p+1} - 3 = 0$  (2 marks)

(b) On the axes below, sketch the graph of  $y = \ln(x - 2) + 1$ .

(3 marks)

