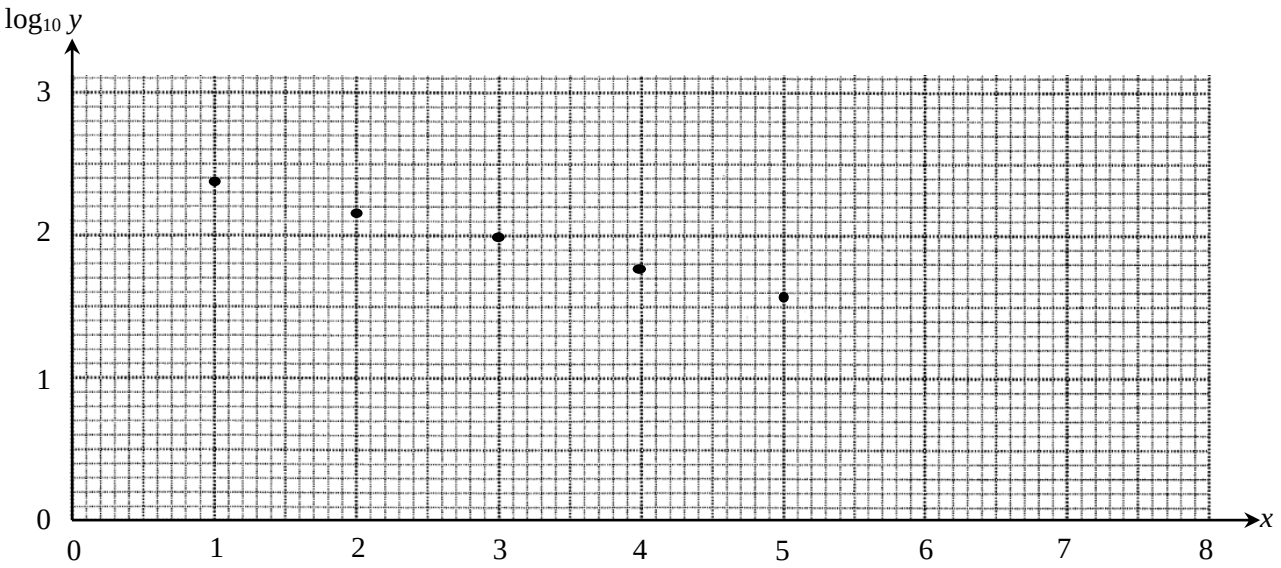
5 A doctors' surgery starts a campaign to reduce missed appointments.
The number of missed appointments for each of the first five weeks after the start of the campaign is shown below.

Number of weeks after the start (x)	1	2	3	4	5
Number of missed appointments (y)	235	149	99	59	38

This data could be modelled by an equation of the form $y = pq^x$ where p and q are constants.

(a) Show that this relationship may be expressed in the form $\log_{10} y = mx + c$, expressing m and c in terms of p and/or q. **[2]**

The diagram below shows $\log_{10} y$ plotted against x, for the given data.



(b) Estimate the values of p and q. **[3]**

(c) Use the model to predict when the number of missed appointments will fall below 20.

Explain why this answer may not be reliable. **[2]**