

10

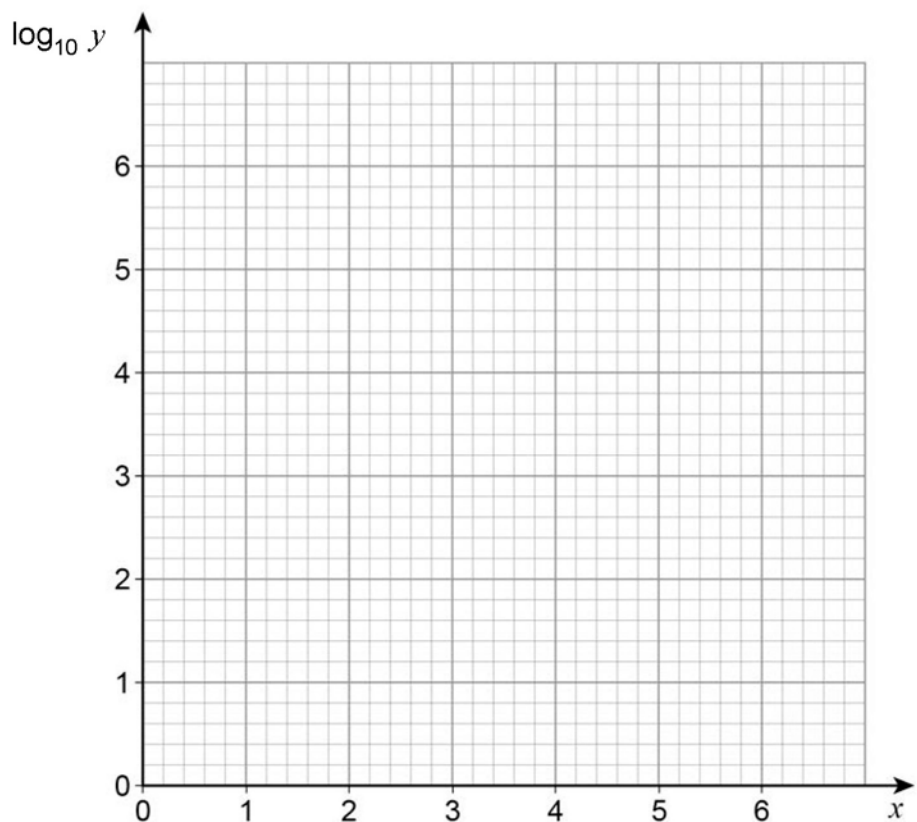
A student conducts an experiment and records the following data for two variables,  $x$  and  $y$ .

$x$	1	2	3	4	5	6
$y$	14	45	130	1100	1300	3400
$\log_{10} y$						

The student is told that the relationship between  $x$  and  $y$  can be modelled by an equation of the form  $y = kb^x$

10 (a) Plot values of  $\log_{10} y$  against  $x$  on the grid below.

[2 marks]



10 (b) State, with a reason, which value of  $y$  is likely to have been recorded incorrectly.

[1 mark]

10 (c) By drawing an appropriate straight line, find the values of  $k$  and  $b$ .

[4 marks]