

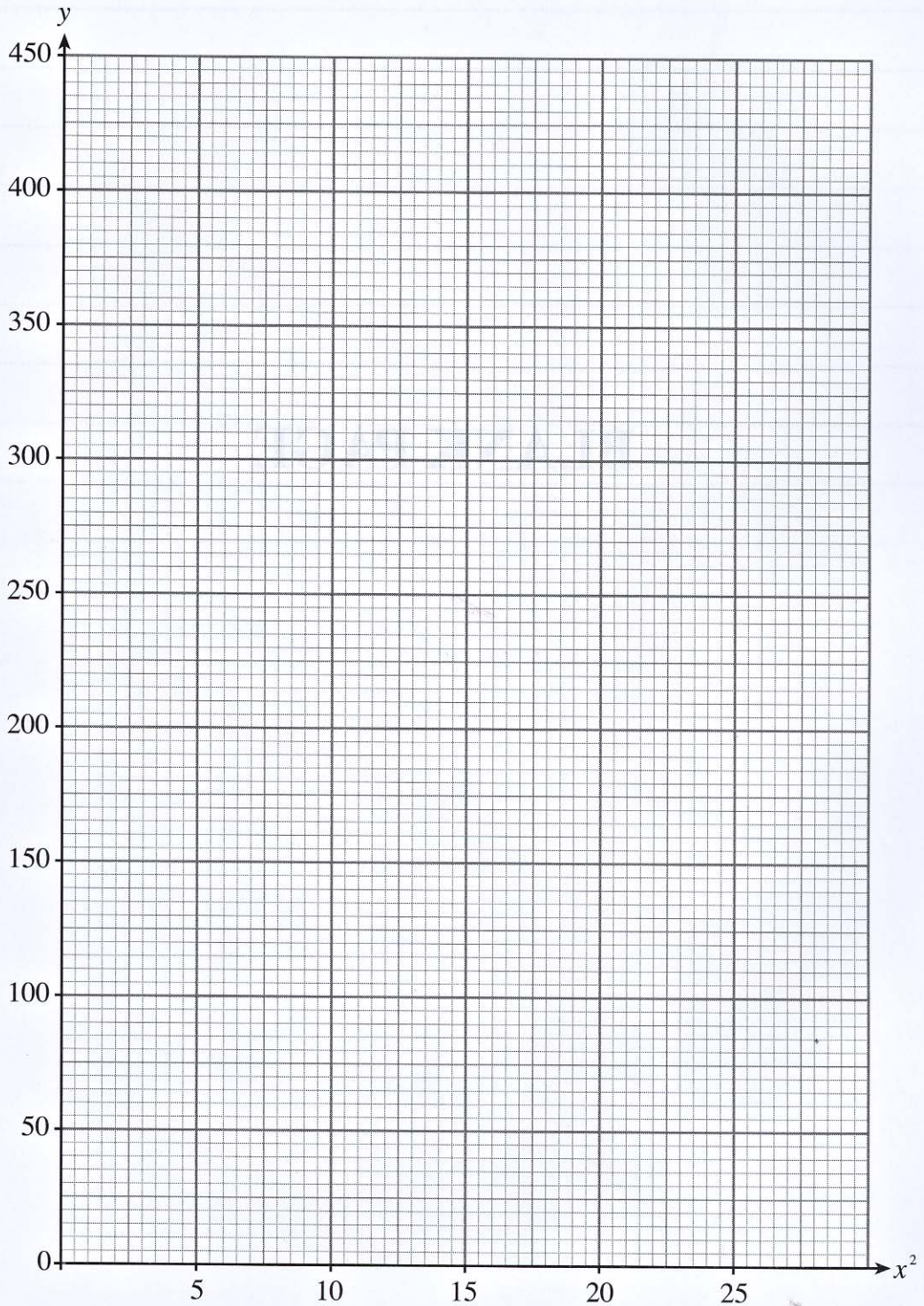
25. The data in the table was recorded during an experiment. Results were recorded for the two variables  $x$  and  $y$ .



$x$	1	2	3	4	5
$y$	48	81	148	236	348

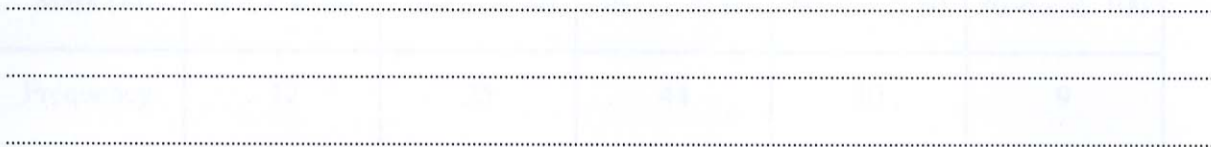
(a) On the graph paper plot the values of  $y$  against the values of  $x^2$ .

[2]



(b) Before starting the experiment, it was already known that  $y$  is approximately equal to  $ax^2 + b$ .

Use your graph to estimate  $a$  and  $b$ .



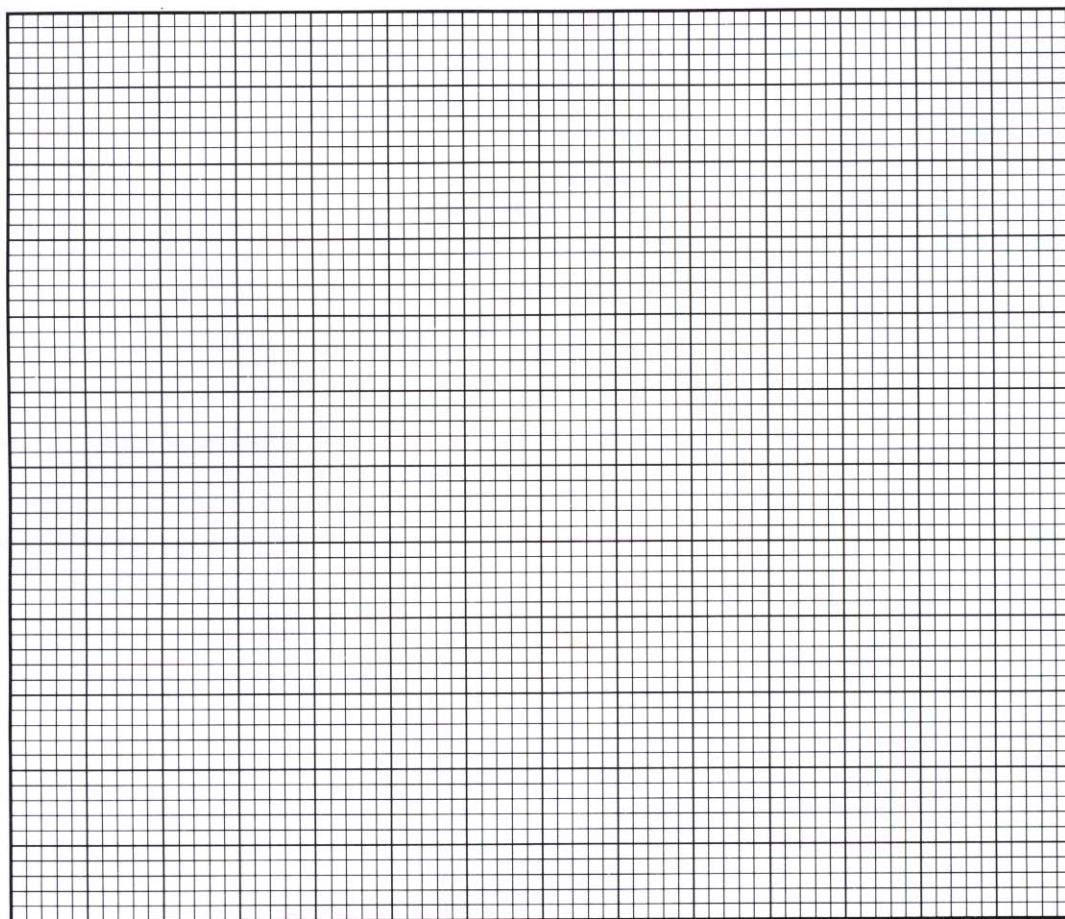
The image shows a grid of graph paper with horizontal and vertical lines. The grid is intended for plotting a graph. The grid is composed of 10 columns and 10 rows of squares. The lines are light blue and the background is white.

[3]


25. The data in the table was recorded during an experiment. Results were recorded for two variables  $x$  and  $y$ .

$x$	1	2	3	4
$y$	11.5	21.9	50.4	105.9

- (a) On the graph paper plot the values of  $y$  against the values of  $x^3$ .



[2]

- (b) Before starting the experiment it was already known that  $y$  is approximately equal to  $px^3 + q$ .  
Use your graph to estimate  $p$  and  $q$ . 

[3]