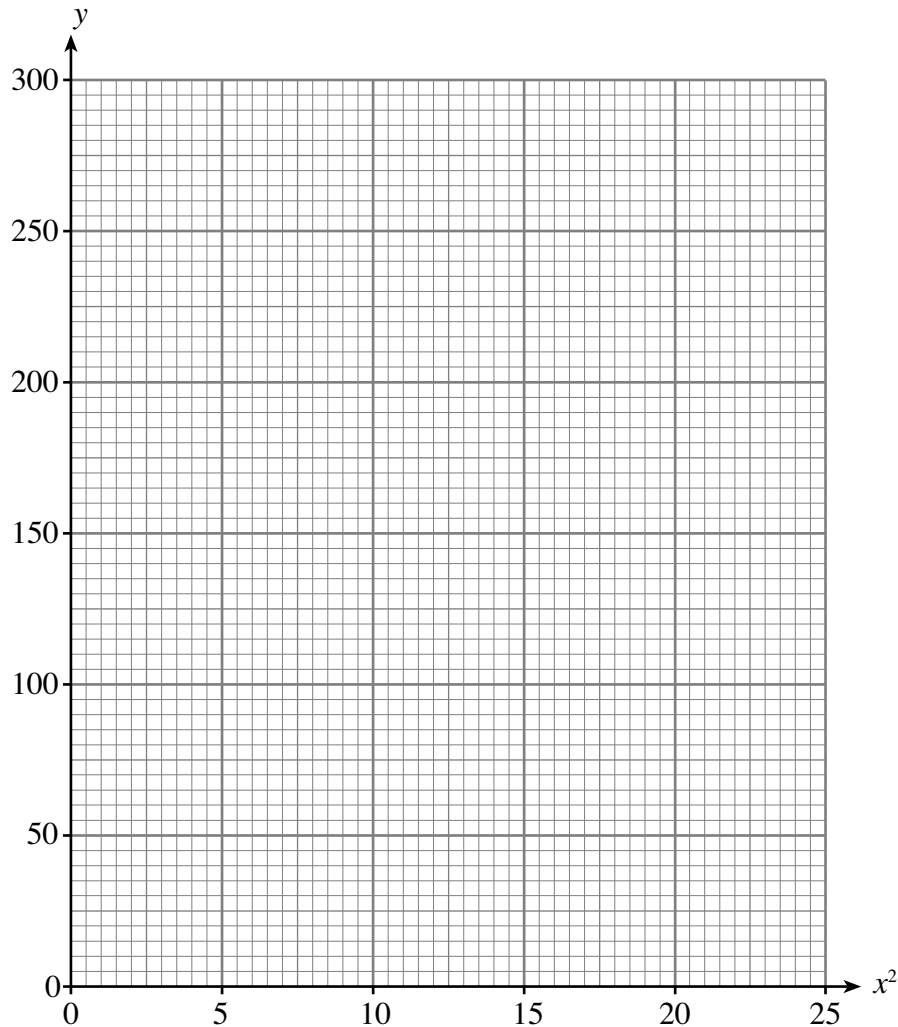


17. During an experiment the value of a variable  $y$  was found for different values of  $x$ . The results are recorded in the following table.

$x$	1	2	3	4	5
$y$	190	170	130	70	0

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

[2]



- (b) It is known that  $y$  is approximately equal to  $ax^2 + b$ . Use your graph to estimate the values of  $a$  and  $b$ .

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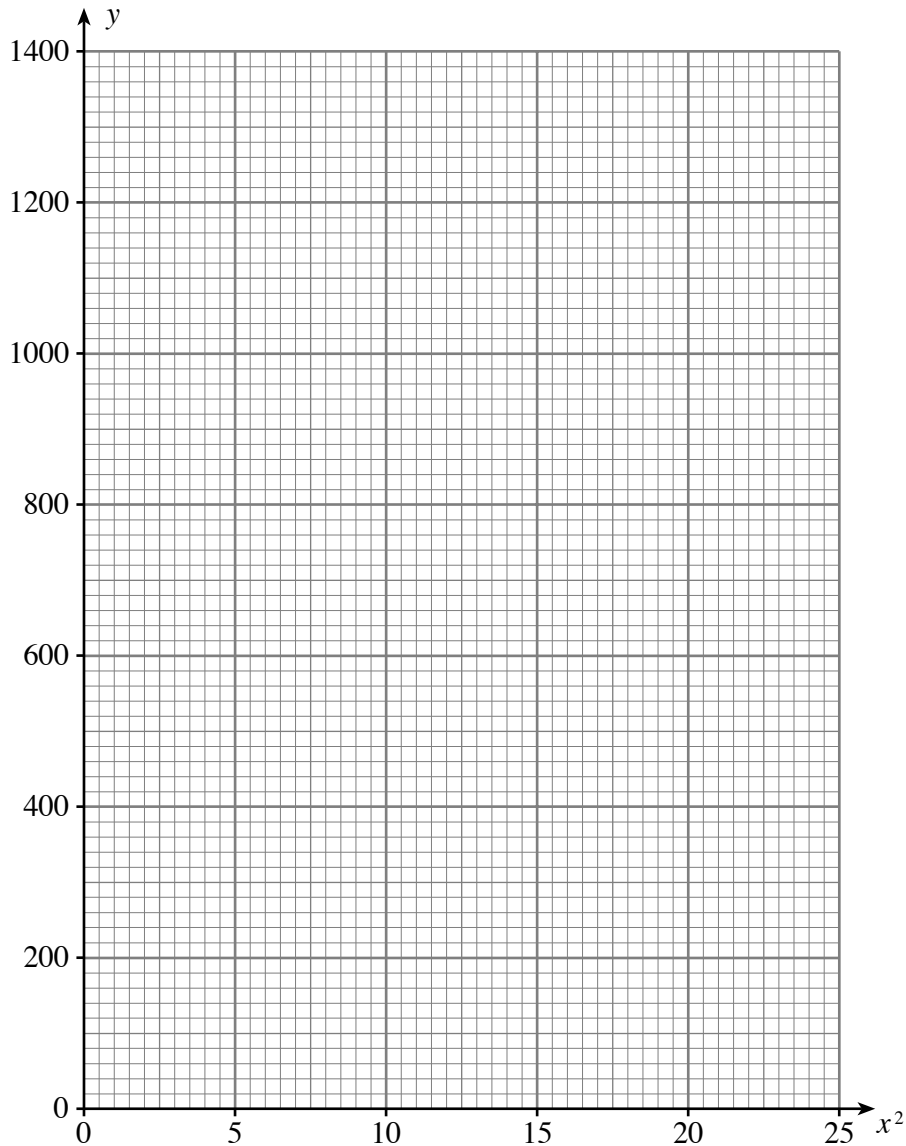
[3]

23. 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
$y$	170	320	575	925	1370

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

[2]



- (b) It is known that  $y$  is approximately equal to  $ax^2 + b$ .  
Use your graph to estimate the values of  $a$  and  $b$ .

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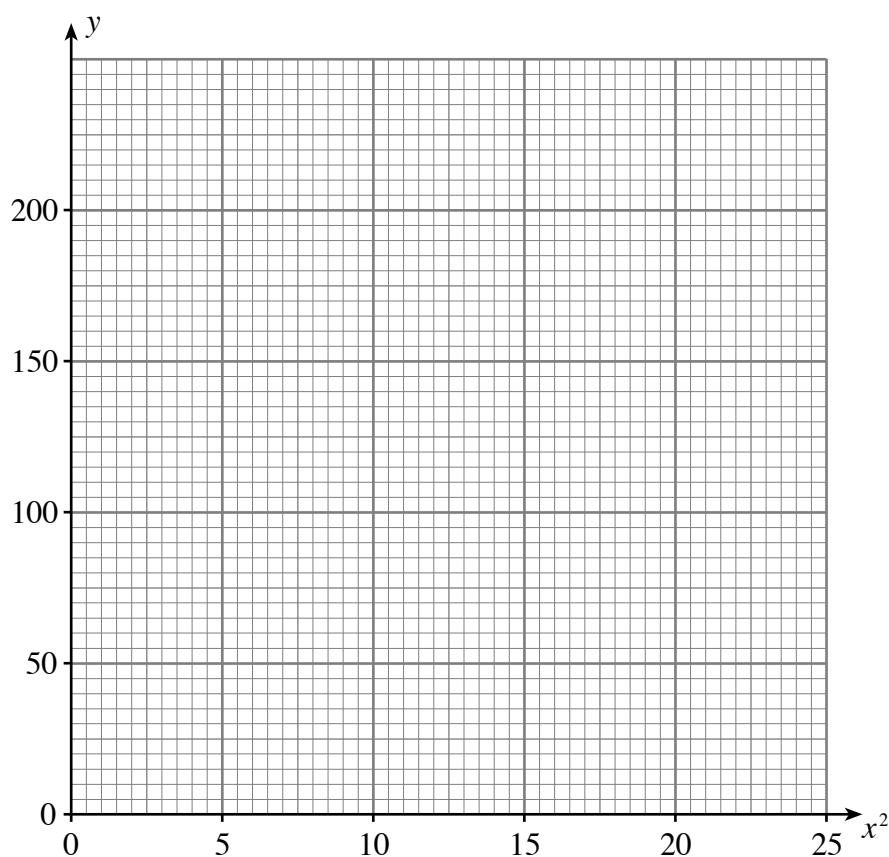
[3]

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
$y$	31	52	87	136	199

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

[2]



- (b) It is known that  $y$  is approximately equal to  $ax^2 + b$ .  
Use your graph to estimate the values of  $a$  and  $b$ .

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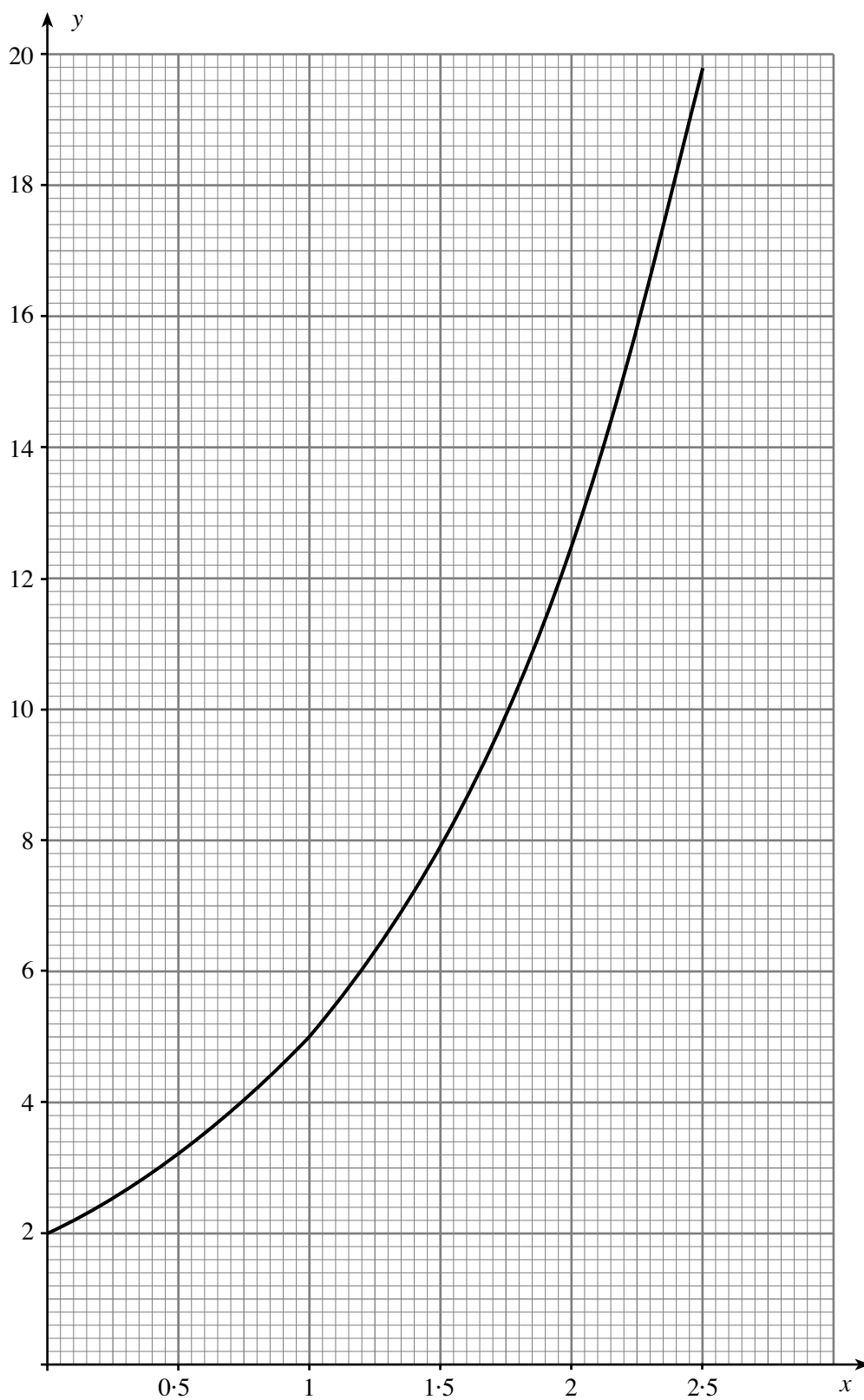
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[3]

23. The diagram shows the graph of  $y = bc^x$ .



Use the graph opposite of  $y = bc^x$  to find the values of  $b$  and  $c$ .

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[4]