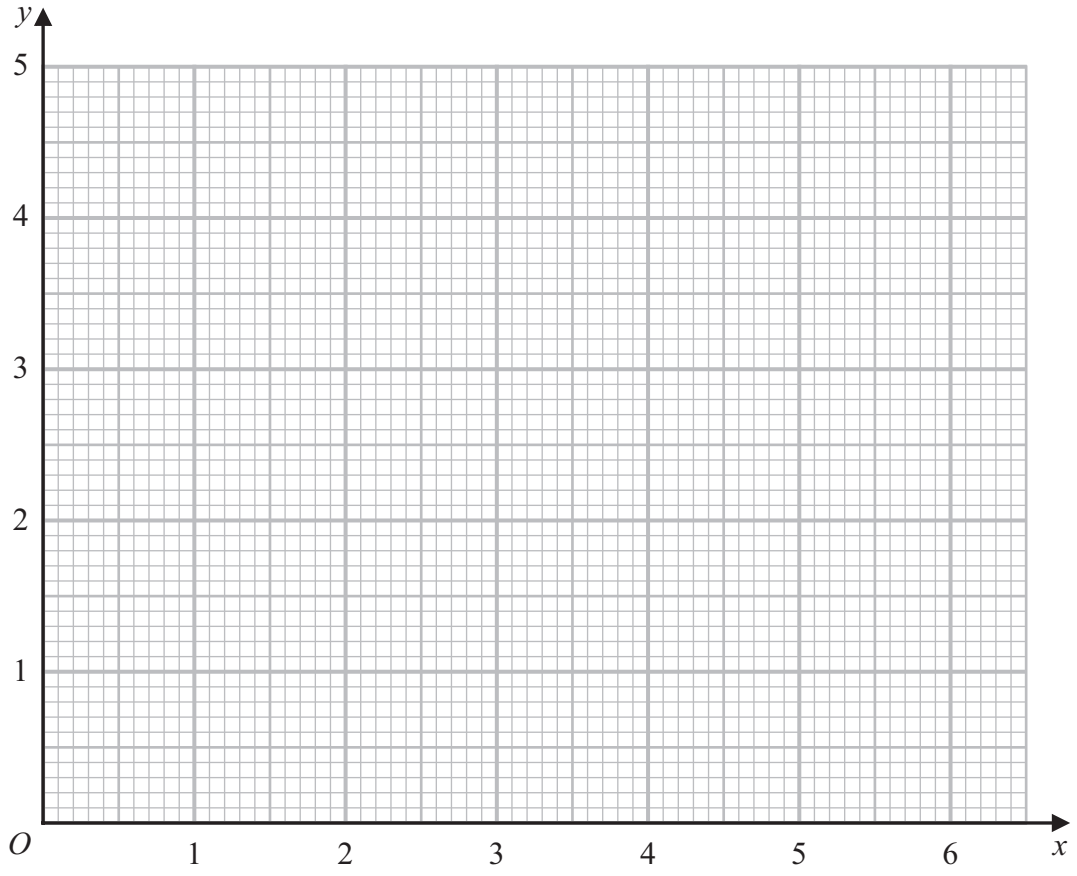
**12** (a) Complete the table of values for $y = \frac{1}{2}\left(x + \frac{4}{x}\right)$

| $x$ | 0.5 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| $y$ | 4.25 | | | 2.17 | 2.5 | 2.9 | 3.33 |

**(1)**

(b) Draw the graph of $y = \frac{1}{2}\left(x + \frac{4}{x}\right)$ for $0.5 \leqslant x \leqslant 6$




**(2)**

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(c) By drawing a suitable line on the grid, find estimates for the solutions of the equation $x + \frac{4}{x} = 6$

Give your answers correct to one decimal place.

.....

**(2)**

**(Total for Question 12 is 5 marks)**

**13** (a) Simplify fully $\left(\frac{125x^6}{y^{15}}\right)^{\frac{2}{3}}$

.....

**(2)**

Given that $4^n = \frac{4^m}{64^p}$

(b) Express $n$ in terms of $m$ and $p$

$n =$ .....

**(2)**

**(Total for Question 13 is 4 marks)**

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