

- 1 Falla buys 3000 square metres of land for a house and garden.  
The garden is divided into areas for flowers, vegetables and grass.

He divides the land in the following ratio.

$$\text{house} : \text{flowers} : \text{vegetables} : \text{grass} = 4 : 7 : 8 : 5$$

- (a) (i) Show that the area of land used for flowers is 875 m<sup>2</sup>.

Answer(a)(i)

$$\begin{aligned} \frac{7}{4+7+8+5} \times 3000 \text{ m}^2 &= \frac{7}{24} \times 3000 \text{ m}^2 \\ &= 875 \text{ m}^2 \end{aligned}$$

[2]

- (ii) Calculate the area of land used for the house.

$$\begin{aligned} \frac{4}{4+7+8+5} \times 3000 \text{ m}^2 &= \frac{4}{24} \times 3000 \text{ m}^2 \\ &= 500 \text{ m}^2 \end{aligned}$$

Answer(a)(ii) ..... 500 ..... m<sup>2</sup> [2]

- (b) Write down the fraction of land used for vegetables.  
Give your answer in its simplest form.

$$\begin{aligned} \frac{8}{4+7+8+5} &= \frac{8}{24} \\ &= \frac{8 \div 8}{24 \div 8} \\ &= \frac{1}{3} \end{aligned}$$

Answer(b) .....  $\frac{1}{3}$  ..... [2]

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