

- 1 Ahmed and Babar share 240 g of sweets in the ratio 7 : 3.

Calculate the amount Ahmed receives.

$$\begin{aligned}\text{Ahmed} &= \frac{7}{7+3} \times 240 \text{ g} \\ &= \frac{7}{10} \times 240 \text{ g} \\ &= 168 \text{ g}\end{aligned}$$

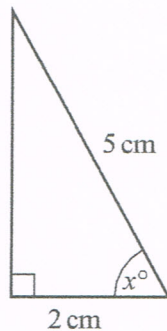
Answer 168 g [2]

- 2 Factorise completely.

$$\begin{aligned}9x^2 - 6x \\ = 3x(3x - 2)\end{aligned}$$

Answer $3x(3x-2)$ [2]

3



NOT TO
SCALE

Calculate the value of x .

$$\begin{aligned}\cos x &= \frac{2}{5} \\ x &= \cos^{-1}\left(\frac{2}{5}\right) \\ x &= 66.4\end{aligned}$$

Answer $x =$ 66.4 [2]

- 4 An equilateral triangle has sides of length 6.2 cm, correct to the nearest millimetre.

Complete the statement about the perimeter, P cm, of the triangle.

$$\begin{array}{lcl}\text{Side!} & \begin{array}{c} \text{lower bound} \\ 6.15 \end{array} & \begin{array}{c} \text{upper bound} \\ 6.25 \end{array} \\ & 6.15 \leq 6.2 < 6.25 & \\ \text{Perimeter!} & 3 \times 6.15 & 3 \times 6.25 \\ & = 18.45 & = 18.75\end{array}$$

Answer 18.45 $\leq P <$ 18.75 [2]