

- 1 (a) Indira buys 1250 square metres of land to build a hotel.
Each square metre of land costs \$12.

Calculate the cost of the land.

$$1250 \times \$12 = \$15000$$

Answer(a) \$ 15000 [1]

- (b) The cost of the land is 3% of the cost of the hotel.

Calculate the cost of the hotel.

$$\begin{array}{l} \text{Land} = 3\% \\ \text{Hotel} = 100\% \end{array} \quad \text{Cost of Hotel} = \frac{100\%}{3\%} \times \$15000$$

$$= \$500000$$

Answer(b) \$ 500000 [2]

- (c) The hotel has 84 rooms.
The types of room are in the ratio family : double : single = 3 : 5 : 4.

Calculate the number of double rooms.

$$\frac{5}{3+5+4} \times 84 = \frac{5}{12} \times 84$$

$$= 35$$

Answer(c) 35 [2]

- (d) Each single room is a cuboid, 4.5 m long, 3.2 m wide and 2.8 m high.

Calculate the volume of a single room.

$$\text{Volume} = 4.5 \text{ m} \times 3.2 \text{ m} \times 2.8 \text{ m}$$

$$= 40.32 \text{ m}^3$$

Answer(d) 40.32 m³ [2]