

m2 = 25 days to go!

- 5 The total population of Great Britain and Ireland is 70 million.

Information about this population is given in the table.

England	54.9 million
Northern Ireland	1.9 million
Republic of Ireland	4.6 million
Scotland	5.5 million
Wales	3.1 million

$$66.9 + \text{Wales} = 70$$

- (a) What is the population of Wales?

Answer 3.1 million [2]

- (b) Sue thinks the population of Northern Ireland and Republic of Ireland makes up more than 10% of the total population of Great Britain and Ireland.

Do you agree?

Explain your answer.

$$\begin{aligned} &10\% \text{ of } 70 \text{ million} \\ &= \frac{1}{10} \text{ of } 70 \text{ million} \\ &= 7 \text{ million} \end{aligned}$$

$$\begin{aligned} &\text{NI} + \text{Rep of Ireland} \\ &= 1.9 + 4.6 = 6.5 \text{ million} \end{aligned}$$

Answer No because 6.5 million is less than 7 million

[2]

19 (a) Pat buys 30 boxes of crisps.

Each box contains 48 packets of crisps.

$$30 \times 48 = 1440 \text{ packets}$$

He sells 80% of the crisps at 60p a packet.

(i) How many packets does he sell at this price?

$$80\% \text{ of } 1440$$

$$\text{sells } 1152 \times$$

$$0.80 \times 1440$$

$$1152$$

Answer £1152 [2]

(ii) How much in total does he sell them for?

$$\text{sells } 1152 \text{ at cost } 60p = £0.60$$

$$1152 \times 0.60$$

$$691.20$$

Answer £ 691.20 [1]

↑
remember
2 deci. places

(b) He sells the rest at 20p a packet.

Pat paid £25 for each box of crisps.

Does Pat make a profit or loss, and how much is this profit or loss?

$$\begin{array}{r} 1440 \\ - 1152 \\ \hline \end{array}$$

288 packets at 20p

$$288 \times 0.20$$

$$£57.60$$

$$\begin{array}{l} \text{sells } 691.20 + 57.60 \\ \hline £748.80 \end{array}$$

$$\begin{array}{l} \text{buys } 30 \text{ boxes at } £25 \\ 30 \times 25 \\ \hline £750 \end{array}$$

Answer Pat makes a loss of £ 1.20 [3]