Q1

There are 300 people in the cinema.

$\dfrac{1}{6}$ of the 300 people are boys.

$\dfrac{3}{10}$ of the 300 people are girls.

The rest of the people are adults.

Work out how many people are adults.

(4 marks)

Q2

Sapir buys 60 bags.
She pays £3 for each bag.

Sapir sells $\frac{1}{2}$ of the bags for £5 each.

She sells $\frac{1}{3}$ of the bags for £4 each.

Sapir wants to make a total profit of £75

How much should she sell each of the remaining bags for?

(4 marks)

Q1

There are 300 people in the cinema.

$\dfrac{1}{6}$ of the 300 people are boys.

$\dfrac{3}{10}$ of the 300 people are girls.

The rest of the people are adults.

Work out how many people are adults.

$300 \times \dfrac{1}{6} = \dfrac{300}{6} = 50 \text{ Boys}$

$300 \times \dfrac{3}{10} = \dfrac{900}{10} = 90 \text{ Girls}$

$90 + 50 = 140 \text{ Children}$

$300 - 140 = 160 \text{ Adults}$

(4 marks)

Q2

Sapir buys 60 bags.
She pays £3 for each bag.

Sapir sells $\dfrac{1}{2}$ of the bags for £5 each.

She sells $\dfrac{1}{3}$ of the bags for £4 each.

Sapir wants to make a total profit of £75

How much should she sell each of the remaining bags for?

Sapir spends $60 \times £3 = £180$

$60 \times \frac{1}{2} = 30$ bags at £5 each $£5 \times 30 = £150$

$60 \times \frac{1}{3} = 20$ bags at £4 each $£4 \times 20 = £80$

Sales so far $= £230$

Total sales must be £180 + £75 profit
$= £255$

Money still required $= £255 - £230 = £25$

Still has $60 - 50 = 10$ bags left to sell

They need to be sold for $\dfrac{£25}{10} = £2.50$ each

(4 marks)