IGCSE – Percentages/ratio

May 04 Paper 4

1 Fatima and Mohammed each buys a bike.

(a) Fatima buys a city-bike which has a price of \$120.
She pays 60% of this price and then pays \$10 per month for 6 months.

(i) How much does Fatima pay altogether? [2]

(ii) Work out your answer to **part (a)(i)** as a percentage of the original price of \$120. [2]

(b) Mohammed pays \$159.10 for a mountain-bike in a sale.
The original price had been reduced by 14%.
Calculate the original price of the mountain-bike. [2]

(c) Mohammed's height is 169 cm and Fatima's height is 156 cm.
The frame sizes of their bikes are in the same ratio as their heights.
The frame size of Mohammed's bike is 52 cm.
Calculate the frame size of Fatima's bike. [2]

(d) Fatima and Mohammed are members of a school team which takes part in a bike ride for charity.

(i) Fatima and Mohammed ride a total distance of 36 km.
The ratio distance Fatima rides : distance Mohammed rides is 11 : 9.
Work out the distance Fatima rides. [2]

(ii) The distance of 36 km is only $\frac{2}{23}$ of the total distance the team rides.

Calculate this total distance. [2]

Oct 01 Paper 4

2

1 In an election in Anyville, the Blue party got 40% of the votes.

The Orange party got 11 424 votes which was seven eighths of the Blue party vote.

Some people voted for other parties and some did not vote at all.

(a) Calculate

(i) how many people in Anyville voted for the Blue party, [2]

(ii) how many people in Anyville voted. [2]

(b) There were 42 320 people in Anyville.

Calculate the percentage of people in Anyville who did **not** vote. [2]

(c) There were 572 senators in the new National Assembly.

The numbers of senators in the Blue, Orange and other parties were in the ratio

Blue : Orange : Others = 6 : 3 : 2.

Calculate

(i) the number of senators in the Orange party, [2]

(ii) the difference between the number of senators in the Blue party and the number who were **not** in the Blue party. [3]