

ARITHMETIC (Q 1, PAPER 1)

2005

- 1 (a) Express 35 cm as a fraction of 1 m. Give your answer in its simplest form.
- (b) (i) The approximation  $50 \times 80$  was used for the calculation  $51 \times 79$ .  
Find the percentage error, correct to one decimal place.
- (ii) Express the ratio  $\frac{1}{2} : \frac{1}{3} : \frac{1}{4}$  as a ratio of natural numbers.  
Divide 325 in the ratio  $\frac{1}{2} : \frac{1}{3} : \frac{1}{4}$ .
- (c) At the start of the year 2000 the population of a particular town was  $P$ .  
During the year 2000, the population of the town increased by 10%.
- (i) Express, in terms of  $P$ , the population of the town at the end of the year 2000.
- (ii) During the year 2001 the population of the town increased by 4%.  
During the year 2002 the population increased by 2%.  
Find the total percentage increase in the population of the town over the three years.
- (iii) The actual increase in the population was 8344. Find the value of  $P$ .

ANSWERS

- 1 (a)  $\frac{7}{20}$
- (b) (i) 0.7 (ii) 6:4:3; 150, 100, 75
- (c) (i)  $1.1P$  (ii) 16.688 (iii) 50,000