

ARITHMETIC PAPER I

Time allowed: 1 hour

Answer ALL questions. All working to be shown. Marks will be deducted for untidy work.

1. How many pence are there in $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{3}{4}$, $\frac{7}{10}$ of £1?

2. Reduce the following fractions to their lowest terms:

(i) $\frac{15}{20}$ (ii) $\frac{24}{54}$ (iii) $\frac{56}{84}$

3. Find the value of:

(i) $\frac{3}{4}$ of 3 hours (ii) $\frac{4}{5}$ of 5 metres

4. Simplify

(a) $8.9 + 16 + 0.7$

(b) $19 - 7.52$

(c) $\frac{3}{4} + \frac{2}{3}$

(d) $\frac{3}{4} - \frac{2}{3}$

5. (a) Multiply 765 by 307

(b) Divide 1469 by 13

(c) Multiply 27.3 by 4.3

(d) Divide 283.8 by 1.1

6. (a) Add $4\frac{2}{3}$ to $2\frac{1}{5}$

(b) Subtract $2\frac{4}{7}$ from $4\frac{1}{3}$

7. Multiply $2\frac{1}{3}$ by $1\frac{1}{4}$

8. Divide $1\frac{4}{7}$ by $2\frac{1}{3}$

9. Change $4\frac{13}{25}$ into a decimal

10. How many seconds are there between 11.34 a.m. and 12.40 p.m.?

11. A candidate obtained 48 out of 250. Express this as a percentage.

12. A candidate obtained 36% in an examination. If ^{marks} 125 were available, how many did he obtain?

13. What fraction is 3 cms 2mm of 1 km ?

14. How many bottles containing 350 cc each can be filled from a barrel containing 200 litres, and how much is left? (1 litre = 1000 cc).

15. Nails are sold in two ways. Method A: 200 cost 47p. Method B: $\frac{1}{2}$ kgm costs 50p. If each nail weighs 2 gms explain clearly which method, A or B, is the more economical.

16. On average there are eight words per line in a book. If there are 40 pages in the book, and the book contains 6400 words in all, what is the average number of lines per page.

$$\begin{array}{r} 15 \\ 350 \overline{) 6000} \\ \underline{3500} \\ 2500 \\ \underline{2100} \\ 400 \end{array}$$

150 cc

415% and 150 cc left

$$\begin{array}{r} 4.52 \\ 25 \overline{) 130.50} \\ \underline{100} \\ 305 \\ \underline{250} \\ 550 \\ \underline{500} \\ 50 \end{array}$$

$$\begin{array}{r} 4.52 \\ 25 \overline{) 130} \\ \underline{100} \\ 30 \\ \underline{25} \\ 5 \end{array}$$

$$\frac{400}{2} = 200 \text{ cc} \quad 400 \text{ } 400 \text{ } 600$$