

per cent. of the remainder, and had 36 left: how many had he at first?

Sol.—20 per cent lost = $\frac{1}{5}$ loss $\therefore \frac{4}{5}$ rem.: 25 per cent. of this sold = $\frac{1}{4}$ sold $\therefore \frac{3}{5}$ rem. = 36, \therefore &c.

11. 80 per cent of \$250 is $62\frac{1}{2}$ per cent. of what watch cost: find the cost.

12. In a school, 20 per cent. of the scholars are in the 5th class, each of the next three classes contains $18\frac{1}{3}$ per cent. of the remainder: what percentage of the school is in the primary class?

Sol.—20 per cent. in 5th class \therefore 80 per cent. = $\frac{4}{5}$ in the other classes; $18\frac{1}{3}$ per cent. $\times 3 = 55$ per cent. = $\frac{11}{20}$, and $\frac{11}{20}$ of $\frac{4}{5} = \frac{11}{25}$ in three of remaining classes $\therefore \frac{4}{5} - \frac{11}{25} = \frac{9}{25} = 36$ per cent. in last class.

EXAMPLES.—3.

1. If I add $\frac{1}{2}$ of unity to itself, what fractional part of the sum must I take off so that the remainder may be unity?

2. What part taken from a number is equal to $\frac{1}{4}$ of the remainder?

Sol.—The remainder $+\frac{1}{4}$ of rem. ($=\frac{5}{4}$ rem.) = given number $\therefore \frac{4}{5}$ of number = rem., and $\frac{1}{5}$ has to be subtracted.

3. To a number $\frac{1}{3}$ of itself is added, what part must be taken from the sum to get the number?

4. What part taken from a number is equal to $\frac{2}{3}$ of the remainder?