

XII. A. These preliminary exercises are of great importance. Pay special attention to the following:—

1. The reading of decimal fractions as rates per cent. Since hundredths occupy two decimal places, the first two decimal figures are read as per cent., the others as a fraction of one per cent., *e.g.*, $\cdot 605$ is read $60\frac{1}{2}\%$; $\cdot 002$ is read $\frac{2}{100}$ of one per cent.

2. The changing of common fractions and decimals to rates per cent. and *vice versa*. The common business fractions (halves, thirds, etc.) should be reduced to per cent., and pupils should be made thoroughly familiar with them. In working examples in percentage they should be able to use common fractions or decimals with equal facility.

In deciding whether to use common fractions or decimals in working examples in percentage, a knowledge of the table on p. 36 is necessary. This table gives the rates per cent. that can be expressed in little fractions. They are the rates which most frequently occur in business transactions.

3. Exercises should be given in pointing out the *base*, the *percentage* and the *rate* until these factors are readily recognised. Preliminary work of this kind will pay by saving time later on.

XII. B. Fundamental Case.—To find the *percentage* when the *base* and *rate* are given. This problem is an old friend in a new dress. It is to *take a fractional part of a given number*. Direct attention to the following:—

$$\frac{3}{4} \text{ of } 20 = 15. \quad \cdot 75 \text{ of } 20 = 15. \quad 75\% \text{ of } 20 = 15.$$

Sight examples will generally be worked best by changing the rate per cent. to a common fraction, *e.g.*, $12\frac{1}{2}\%$ of $64 = \frac{1}{8}$ of $64 = 8$.