

Notes for Book III.

Figures in heavy type at the top of each page indicate corresponding pages in the Pupils' Book. Roman numerals on a page indicate corresponding exercises in the Pupils' Book.

Teachers are recommended to read the general suggestions (which occupy pages 1-4 of the Teachers' Manual for Book II.) on **Rapid Work, Mental and Sight Work, Written Work, Analyses and Explanatory Statements, Problems, Review, etc.**

I. Pupils should learn to manipulate *little fractions* with ease and by the shortest methods. The following exercises have that end in view. They should be worked at sight unless the numbers concerned are too great.

I. A. *To add or subtract two fractions when the numerator is 1 in each case.* Add (or subtract) the denominators for the new numerator and multiply them for the denominator.

I. B. *To find the numerator.* Multiply across (*i.e.*, the numerator of the first by the denominator of the second and the denominator of the first by the numerator of the second). Add or subtract the results.

I. C. This exercise must be worked at sight in two steps. The fractions must be added or subtracted first and the whole numbers afterwards. The two partial results may be recorded separately as they are found. Pupils are recommended to take the fraction of the subtrahend from unity and to add the difference to the fraction of the minuend, *e.g.*, $6\frac{2}{3} - 1\frac{2}{3}$ will be worked mentally as follows: $1 - \frac{2}{3} = \frac{1}{3}$; $\frac{1}{3} + \frac{2}{3} = \frac{1}{1}$; $6 - 2 = 4$. Combined results, $4\frac{1}{1}$. (See Manual II., p. 15.)