

149. Such questions as $7+8+3$, &c., are how many? and 29 less 7, less 6, &c., are how many? or questions in which addition and subtraction are combined, we omit; because, any teacher, by a little practice, can very easily give such exercises to the class, and, moreover, every practical teacher knows that much of the *value* of this part of the Arithmetic depends on the pupil not having seen the questions before the lesson begins.

150. *To find the value of 12 things, the value of one thing being given.*

RULE. Reckon each penny in the given value as a shilling, and each farthing as $3d$.

Ex. Find the value of 12 things at $15\frac{1}{2}d$. each.

By the Rule,

The value req^d. = $1s. \times 15 + 3d. \times 3 = 15s. 9d$.

Reason for the Process.

12 things at $1d$. each = $1s.$; $\therefore$ 12 at $15d$. each = $1s. \times 15 = 15s$.

$12 \dots \dots \frac{1}{2}d. \dots = 3d.$; $\therefore$ 12 at $\frac{1}{2}d$. $\dots = 3d. \times 3 = 9d.$;

$\therefore$ 12 things at $15\frac{1}{2}d$. each = $15s. 9d$.

151. *To find the value of 24 things, the value of one thing being given.*

RULE. Reckon each penny in the given value as $2s.$, and each farthing as $6d$.

152. *To find the value of 48 things, the value of one thing being given.*

RULE. Reduce the given value into farthings, the result reckoned as so many shillings will be the value required.

Ex. Find the value of 48 things at $18\frac{1}{2}d$. each.

By the Rule, since $18\frac{1}{2}d. = 75q.$,

the value req^d. = $75s. = £3. 15s$.

Reason for the Process.

48 things at $\frac{1}{2}d. = 48q. = 1s.$;

$\therefore$ 48 things at $75q. = 1s. \times 75 = 75s. = £3. 15s$.

153. *To find the value of 144 things, the value of one thing being given.*

RULE. (1) Find the value of 12 things by Rule 150: then consider this value as the value of one thing, and apply Rule 150 a second time.

Ex. Find the value of 144 things at $13\frac{1}{2}d$. each.