22. We have worked out the examples in Art. 21 at full length, but in practice they may be abbreviated, by combining the symbols or digits by a mental process, thus

To	$c+d+10$	From	$c+d+10$
Add	$c-d-7$	Take	$c-d-7$
Sum	$2c \quad +3$	Remainder	$2d+17$

23. We have said that

instead of $a+a$ we write $2a$,
.... $a+a+a$ .... $3a$,

and so on.

The digit thus prefixed to a symbol is called the *coefficient* of the term in which it appears.

24. Since

$$3a=a+a+a,$$
$$\text{and } 5a=a+a+a+a+a,$$
$$3a+5a=a+a+a+a+a+a+a+a$$
$$=8a.$$

Terms which have the same symbol, whatever their coefficients may be, are called *like* terms: those which have different symbols are called *unlike* terms.

Like terms, when positive, may be combined into one by adding their coefficients together and subjoining the common symbol: thus

$$2x+5x=7x,$$
$$3y+5y+8y=16y.$$

25. If a term appears without a coefficient, *unity* is to be taken as its coefficient.

Thus $$x+5x=6x.$$

26. Negative terms, when like, may be combined into one term with a negative sign prefixed to it by adding the coefficients and subjoining to the result the common symbol.

Thus $$2x-3y-5y=2x-8y,$$
$$\text{for } 2x-3y-5y=2x-(3y+5y)$$
$$=2x-8y.$$

So again $$3x-y-4y-6y=3x-11y.$$