

**THE ROYAL SCHOOL
SERIES. ELEMENTARY
ALGEBRA. SECOND BOOK**

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The Royal School Series. Elementary Algebra. Second Book by Anonymous

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SERIES. ELEMENTARY
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The Royal School Series.

ELEMENTARY ALGEBRA.

SECOND BOOK.



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1875.

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PREFACE.

AN effort is made in the work, of which this is the Second Part, so to simplify the subject of Algebra as to bring it within the capacity of very young pupils. Its various processes are unfolded in a carefully graduated series of paragraphs; the chief object throughout being to lay a *broad* foundation, so that the learner may afterwards pursue the study with profit in works of a more advanced character.

JAMES MARTIN.

WINDGWOOD INSTITUTE,
BURBANK.

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ELEMENTARY ALGEBRA.

SECOND BOOK.

28. The Multiplication of algebraical quantities has been referred to in paragraph 7. In addition to what was therein stated, two other things remain to be determined :

- (1.) The **numeral** coefficient of the product.
- (2.) The **sign** of the product.

The first of these is easily determined, the coefficient of the product being the product of the coefficients.

Thus, the numerical coefficient of $7a \times 4bc = 28$,

$$4b \times c = 4;$$

$$\text{or, of } 3a \times 4b \times 12c = 144.$$

29. In order to determine the **signs** of the product, it must be remembered that Multiplication is a shortened form of Addition. Thus, in ordinary Arithmetic, in order to find 7 times 365, instead of adding 365 seven times together, or *vice versa*, we merely multiply the numbers together. So in Algebra :

- (1.) b , that is $+b$, multiplied by $+a$, means that b is to be added to itself a times. Thus the product is $+ab$.