

numbers occupied an important place alongside of algebra and geometry. The art of calculating was gradually introduced into the elementary and trade schools, while the Church taught enough to enable the priests to compute the occurrences of religious days.

In the twelfth century, Arabic manuscripts were translated, and Arabic and Hindu methods began to gain a foothold. The abacus was discarded for the principle of local value and the zero of the Arabs, but not without a long struggle. The school opposed to the abacial computation became known as the algoristic, and was assisted materially by the Italian scholar, Leonardo of Pisa, also called Fibonacci. It was well into the middle of the fifteenth century before the use of the Hindu numerals was general in England, France or Germany.

Reference should be made to the formation of the Hanseatic League in the thirteenth century. This resulted in schools being established where arithmetic was the chief subject. This was necessary owing to the ever-increasing demands of commerce, for which the arithmetic of the church schools was wholly inadequate. In the League's schools the arithmetic was entirely commercial and unsuited to young children, and consequently not taught to them.

The Renaissance gave an impetus to the teaching of arithmetic, and from this period arithmetic as we know it today dates. It was largely coloured by the arithmetic which the Greeks brought with them from Constantinople, prominence being given to the theory of numbers and geometrical designs. The invention of printing made books possible, and helped to definitely fix Hindu numerals, which fact, of course, made arithmetic more popular.

Between 1550 and 1650 the common symbols of operation, such as we have them, were invented and established. Prior to this, all statements of operations had to be set out at length in writing. About the middle of the eighteenth century decimal fractions became firmly established, and with their establishment business arithmetic was much facilitated. The present methods of multiplication and division also owe their existence to the improvements inspired by the New Learning.