

Simon Stevin 1548 - 1620

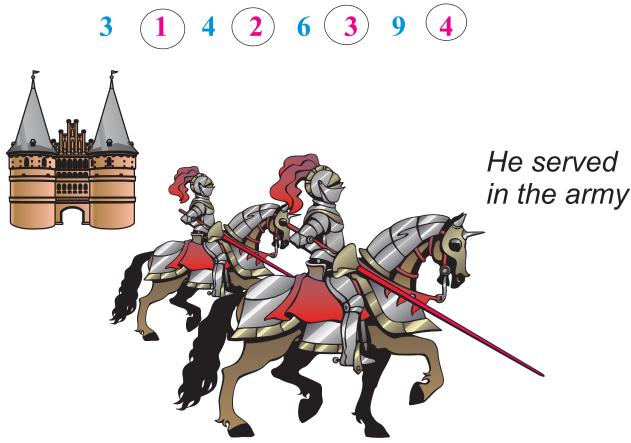
Stevin (or, in the Latin form, Stevinus) was known as '*The Dutch Archimedes*'. He contributed to many areas of knowledge: arithmetic, algebra, geometry, hydrostatics, engineering, theory of music, artillery, astronomy and so on.

Stevin was born in 1548 in Bruges, (now in Belgium) in the Southern Netherlands. He was employed by the city administration. He travelled over much of Europe. After 1581, he lived in Leiden and the Hague. He was educated at the University of Leiden and later he taught there. By himself he studied engineering. Eventually, in 1600, he became quartermaster-general of the army.

He married Catharine Cray in 1610 and they had four children, one of whom, Hendrick, also became a scientist.

Stevin is believed to have been a pioneer of decimal fractions. He drew attention to the value of decimal notations and methods of calculation, and he urged the Government to introduce decimal coins and weight and measures - a wish which was only realized two hundred years later after the French Revolution.

Stevin's method of writing decimal fractions, was however rather inconvenient. For instance, he would have written the decimal fraction 0.3469 in the form





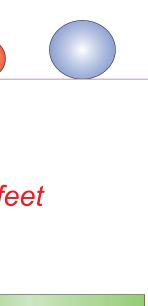
30 feet

He subjoined to each figure an index which showed the place which it occupied to the right of the unit's place.

Among Stevin's greatest achievements was his discovery of some of the most important laws of hydrostatics. He showed experimentally that the pressure exerted by a liquid is dependent only on its vertical height, and is independent of the shape of the vessel in which it is contained.

Stevin and Galileo were almost contemporaries, but they carried out their research quite independently. In one of his books he describes an experiment on falling bodies (such as preformed by Galileo). Two balls of lead, one ten times the weight of the other, were dropped simultaneously from a height of about 30 feet on to a plank. It was noted that they appeared to reach the plank simultaneously. This was the first experimental refutation of Aristotle's dynamic ideas.

In Stevin's time, the musical scale was not evenly tempered which caused a serious problem for players. Many scholars believed that the modern, equally tempered, musical scale originated with Stevin's idea.



He showed that the two lead balls took the same time to fall