

# «There is no royal road to geometry»

Do not confuse «Claudius **Ptolemy**» (90-168 AD) of Alexandria with king «**Ptolemy I Soter**» of Alexandria (305-282 BC)

The famous Greek mathematician Euclid, often referred to as the 'Father of Geometry', upon writing 'Elements' – a treatise in geometry and number theory running into 13 books (chapters) and consisting of 23 definitions, 5 'common notions' and 5 postulates which he used for proving his 465 propositions therein, started teaching it to the village folks who, inspired by his name and fame, voluntarily gathered before him coming from the periphery of Alexandria. Since they were mostly peasants, artisans and daily wagers, he held evening classes to suit their convenience.

The news fell on the ears of King Ptolemy I. He was a ready patron of letters and founder of the Great Library of Alexandria. Besides, he had also personally sponsored this great mathematician.

'What was the beautiful and serene stuff that a mathematician like Euclid, reputed for developing theories from the abstractness, could produce in which even the rustic commoners have started evincing interest,' he wondered. It was all the more perplexing for him to know that they were doing so voluntarily and that too by meeting from their pockets the expenses on oil for lamps to light their path during the travel as well as while studying at Euclid's place. Whereas the prudence would have rather dictated them to save that hard earned precious oil as well as take rest staying at homes for the much needed recovery after the day's toil or at best do something of recreational value in the evening in their localities. He could resist his curiosity no more and went to attend his lectures.

After a week or so, the King found Euclid's seminal work was too difficult to study and so he asked Euclid if there were an easier way to master it. Euclid was reported to have famously quipped: '**Sire, there is no Royal Road to Geometry!**' Euclid then counted his petty savings and holding it in one hand, submissively enquired from the King, 'How much did my Highness spend on oil so far for attending my lectures?' and moving his head towards the villagers, appealed to them to raise, if required, the balance amount through voluntary contributions among themselves so that the King's oil expenses could be defrayed.

'If a student, specially the one who is not a child, cannot derive for himself the importance of learning a subject and the implications it holds to his life situations, no teacher can ever drive home this point to him. Hence, attending the classes by such a person would be a sheer wastage of time and energy for both the teacher and the person concerned,' **he further stated begging the King's pardon and requested the King henceforth not to take the trouble of coming for his classes.**

[http://creative.sulekha.com/euclid-s-famous-reply-to-king-ptolemy-i\\_561353\\_blog](http://creative.sulekha.com/euclid-s-famous-reply-to-king-ptolemy-i_561353_blog)