# Presentations02Greeks

| | | Topic | Presenter | |
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| 1 | | Prove that vertical angles are congruent. | | |
| 2 | | Prove that an angle inscribed in a semi-circle is a right angle. | | |
| 3 | | Show how Thales calculated the height of a pyramid and the distance of a ship from the shore. | | |
| 4 | | Prove the Pythagorean theorem. | | |
| 5 | | Find the formula for the $n^{th}$ triangular number. | | |
| 6 | | Find the formula for the $n^{th}$ pentagonal number. | | |
| 7 | | Prove that the square root of 2 is irrational. (See if you can find out how the Greeks proved it.) | | |
| 8 | | Prove that the square root of 3 is irrational. | | |
| 9 | | Discuss and explain Zeno's Achilles and the Tortoise 'paradox.' Why is it a 'paradox'? | | |
| 10 | | What were Zeno's paradoxes? What was their purpose? | | |
| 11 | | Argue that there are only five Platonic solids. | | |
| 12 | | Describe Plato's Theory of Forms (or Ideals) | | |
| 13 | | With compass and straight edge: bisect an angle. | | |
| 14 | | With compass and straight edge: square the equilateral triangle. | | |
| 15 | | With compass and straight edge: duplicate the square. | | |
| 16 | | With compass and straight edge: construct a regular pentagon. | | |