**Presentations02**

|  |  |
| --- | --- |
| Use the figurate square numbers to prove that the sum of the first $n$ odd numbers is $n^{2}.$ |  |
| Use the method of Hippocrates to calculate the area of a lune. |  |
| Use the Quadratrix of Hippias to trisect an angle. |  |
| Use the Quadratrix of Hippias to square the circle. |  |
| Prove that the fifth postulate of Euclid holds if and only if the sum of the angles of triangle is 180o. |  |
| Pons Asinorum: what is it and work through the details. |  |
| Prove the Exterior Angle Theorem. |  |
| Show how Eratosthenes calculated the size of the earth. |  |
| Use the spiral of Archimedes to trisect an angle. |  |