## Presentations02

| Use the figurate square numbers to prove that the sum <br> of the first $n$ odd numbers is $n^{2}$. |  |
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| Use the method of Hippocrates to calculate the area of <br> 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 <br> if the sum of the angles of triangle is $180^{\circ}$. |  |
| Pons Asinorum: what is it and work through the <br> details. |  |
| Prove the Exterior Angle Theorem. |  |
| Show how Eratosthenes calculated the size of the earth. |  |
| Use the spiral of Archimedes to trisect an angle. |  |

