

UK MATH CLUB

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Finding rational points on circles and other conic sections

The point $(3/5, 4/5)$ is a rational point on the circle of radius 1, since $(3/5)^2 + (4/5)^2 = 1$. I will describe a geometric way of finding all rational points on this circle and other conic sections. Each rational point on the circle of radius one can be used to make a right triangle with integer side-lengths. For example $(3/5, 4/5)$ corresponds to the right triangle with side-lengths 3, 4 and 5. We will apply this idea to find all right triangles with sides of integer length.

4 pm, Wednesday
17 October 2001
CB 331

Pizza and math!

<http://www.ms.uky.edu/~mathclub>