

Rockhurst University Mathematics Problem of the Month

There were no submissions for March's problems, so here they are again. This time, winners will get double prizes! The contest is open to any currently enrolled Rockhurst student. The winner will be chosen according to who has the best solution (not just answer) to the problem, and ties will be resolved by considering the order in which the solutions were received.

Solutions should be submitted to Keith Brandt (Science Center 120) by the end of the month. Winners receive wonderful prizes, so give these problems some thought!

Problems for April 2009:

1. An equilateral triangle is inscribed inside a circle. A second circle is inscribed inside the triangle. What is the ratio obtained by dividing the area of the larger circle by that of the smaller?
2. Find a polynomial function $p(n)$ that agrees with the following data:

n	0	1	2	3	4	5
p(n)	3	4	8	15	25	38