

## Rockhurst University Mathematics Problem of the Month

Congratulations to Lee Haworth, winner of January's contest. She correctly answered the question about Sam's ties (247). No students solved the triangle problem. Honorable mention goes to Peter Simone and Prof. Colombo (for effort). 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. Ties will be resolved by considering the order in which the solutions were received.

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

### Problems For February 2005:

1. A ball is rolled over a level lawn with initial velocity of 25 ft/sec. Due to friction, the velocity decreases at a rate of  $6 \text{ ft/sec}^2$ . How far will the ball roll?
2. Prove that a number written in base 3 is odd if and only if the digit 1 occurs in it an odd number of times.