

## Rockhurst University Mathematics Problem of the Month

Congratulations to Josh Hilliard, winner of September's problem. He wins a prize from the POM collection. Honorable mention goes to Angela Whatley, Br. Glenn Kerfoot, and Peter Simone. 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. The winners will receive wonderful prizes, so give these problems some thought!

### Problems For October 2004:

1. You have four dice of the same size, each a different color. You plan to stack the dice on top of each other to make a small tower. How many different ways can this be done? Note you must account for all the different ways to position and orient each die in the tower.
2. Determine the dimensions of rectangle having perimeter 16 inches and area 14 square inches.