PROBLEMS FOR NOVEMBER'08

1. Continued Radicals

Problem provided by Hossein Behforooz, Ph.D., Utica Colege

Find an expression for the continued radical

$$C = \sqrt{m + \sqrt{m + \sqrt{m + \ldots}}}$$

in terms of m that does not involve a continued radical. Then determine all positive integers m so that C is a positive integer.

2. Non-square Factors

Problem provided by Jeff Hoag, Providence College

How many of the positive factors of the number 36,000,000 are *not* perfect squares?

Winner gets a recognition on the problem board and the mathclub website and a $5 gift card from the bookstore.

Copies available below! Feel free to take one and enjoy! Submit your solutions to one of the Math Professors at school by December 1. You can also find a copy at the Math Club website at

http://faculty.randolphcollege.edu/ykurt/mathclub/mathclub.htm.