PROBLEM OF THE MONTH
JANUARY/FEBRUARY 2012

SUM OF THE PRODUCT OF SUBSETS

Let $A = \{2, 3, 5, 7, 11, 13\}$, and let $A_1, A_2, \ldots, A_{63}$, be all of the nonempty subsets of $A$. Let $f(M)$ denote the product of all the elements in $M$.

Compute $f(A_1) + f(A_2) + \ldots + f(A_{63})$

For contest rules and prize information see the Problem of the Month display on the first floor of LeConte College. Copies of problems are available in the student lounge in LC 311. Contact Dr. Kaczkowski (kaczs@math.sc.edu) or Brett Barwick (barwicjb@mailbox.sc.edu) for more details.

Solutions due in LC 411 by February 15th.