## Pi Mu Epsilon Problem of the Month September 2010

We would like to split 300 pizzas among 6 clubs so that (1) the shares form an arithmetic progression, and (2) the sum of the smallest 2 shares is one ninth the sum of the largest 3 shares. What is the share of each club?

Problem of the Month Rules:
$\mathscr{H}$ Submissions must include a complete mathematical justification along with the answer.
If Submissions may only be made by individuals or groups of two and must be dated.
$\mathscr{H}$ Due date: September 27, 2010 before 5 p.m.; they may be given to Dr. Leigh Lunsford, Dr. Phillip Poplin, or Dr. David Shoenthal (Mathematics).

To get your own copy, please visit the
Pi Mu Epsilon Problem of the Month website:
http://www.longwood.edu/staff/shoenthaldw/potm.html

