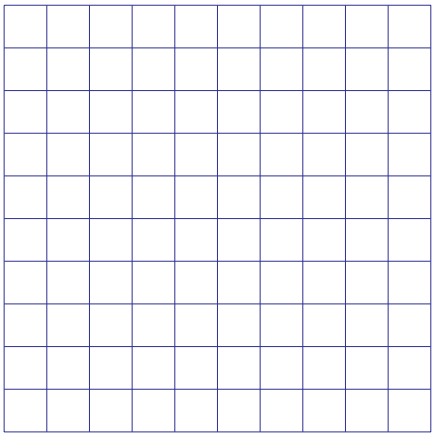
Challenge of the Week

Challenge of the Week # 4 - September 18 to September 25, 2009

A 10×10 grid contains squares of size 1×1, squares of size 2×2, ..., squares of size 9×9, and a single square of size 10×10.



What is the total number of squares of all sizes in a 10×10 grid? Justify your answer.

Direct any questions concerning this week's challenge to Kamlesh Parwani, OM 3351

Rules and Awards

- Any undergraduate currently enrolled at EIU is eligible to participate.
- Each solution is to be the work of one individual and is to be submitted with the solver's name, year in school, email address, local address and home address.
- Each solution is to be written or typed and is due in the main Mathematics Department office (OM3611) by 2:00 p. m., Friday, September 25.
- Entries will be graded on the basis of clarity of exposition and elegance of solution.
- An award of $20 will be given for the best solution. In the case of a two-way tie, the award will be split. If there are more than two 'best' solutions, a drawing will be held for the award. In case no award is made for this week's challenge, $20 will be added to the next week's award.
- Names of all solvers will be posted on the Challenge of the Week bulletin board and on the Challenge of the Week homepage: http://www.ux1.eiu.edu/~dmbroline/chalweek/index.html