

Challenge of the Week

Challenge of the Week # 2 - September 4 to September 11, 2009

There are 12 members of a certain club. Last year, each member sent a birthday cake, with candles, to every other member. (That was a lot of cakes!) Of course, the cake is sent on the person's birthday and the number of candles on the cake was equal to the age of the person receiving the cake. Is it possible that the total number of candles was 2008? Justify your answer.

Direct any questions concerning this week's challenge to Keith Wolcott, OM 3341

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 11.
- 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>