

I U P U I  
MATH CLUB TEASER #57

March 4, 2011  
(due March 11, 2011)

100 grandmothers are flying to Disneyworld in a plane with 100 seats. They enter the plane one at a time, but the first grandmother cannot read her ticket without her glasses, so she will just take a seat at random. From then on, every grandmotherer will sit on her own seat or, if the seat is taken, will take an empty seat at random. What is the probability that the last grandmother will end on her own seat?

The IUPUI Math Club invites everybody to submit solutions to its weekly recreational mathematics problem. Interested individuals and teams of up to four participants can submit written solutions. At the end of the semester, prizes will be distributed among the IUPUI undergraduate teams that submit the most correct solutions. Solutions are due one week after each problem is posted, and should be faxed to (317) 274-3460, dropped off in person at LD 270, or sent by campus or U.S. mail to:

**Math Club Teaser**  
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