

I U P U I

MATH CLUB TEASER #28

September 25, 2009
(due October 2, 2009)

Danica wants to get a driver's licence, but first she has to pass the written examination administered by the Indiana Bureau of Motor Vehicles. The test has 50 multiple-choice questions, each with four possible answers. To pass the exam she must answer correctly at least 42 questions.



Suppose that Danica answers every single question at random. How many times is she expected to take the exam before passing?

The IUPUI Math Club invites everybody to submit solutions to its weekly recreational mathematics problem. Interested individuals and teams of up to four participants must submit a cover sheet (available at jagmath.usg.iupui.edu) together with their written solution. At the end of the semester, every IUPUI student that sent a correct solution will receive a certificate of merit. 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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