

I U P U I
MATH CLUB TEASER #33

October 30, 2009
(due November 6, 2009)

In a building occupied exclusively by married couples and their children, the following facts are true:

- There are more children than adults; more adults than boys; more boys than girls; and more girls than families.
- All couples have children, but no two couples have the same number of children.
- Every girl has at least one brother, and at most one sister.
- One family has more children than all the others put together.

How many families, boys, and girls live in the building?

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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