

I U P U I
MATH CLUB TEASER #24

August 28, 2009
(due September 4, 2009)

Pythagoras McPita is playing Unscrabble and he just got the letters of his name! There is only one word he can make, but first he will have to reorder the letters. To this end, he allows himself two types of moves. He can place the odd letters before the even letters, or bring the first letter to the end of the line. For example, from the initial position $\boxed{\text{M} \mid \text{C} \mid \text{P} \mid \text{I} \mid \text{T} \mid \text{A}}$, he can move to $\boxed{\text{M} \mid \text{P} \mid \text{T} \mid \text{C} \mid \text{I} \mid \text{A}}$ or to $\boxed{\text{C} \mid \text{P} \mid \text{I} \mid \text{T} \mid \text{A} \mid \text{M}}$.

Can you help Pythagoras make $\boxed{\text{I} \mid \text{M} \mid \text{P} \mid \text{A} \mid \text{C} \mid \text{T}}$ in the fewest number of moves?

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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