

I U P U I
MATH CLUB TEASER #19

April 3, 2009
(due April 10, 2009)

The arbitrageur Professor Zerep noticed that there were nine runners in the big race and asked a bookie what were the odds.

“3 to 1 on Sea Biscuit, 4 to 1 on Abercrombie, 7 to 1 on Black Gold, 9 to 1 on Greek Hero and 39 to 1 the field”.

“The field? what is the field?”

“Any of the other five horses wins, you get 39 to 1 on your bet on that horse”, said the bookie, annoyed at the ignorance of some people.

“You mean you give me 39 times what I give you?”

“I pay you your bet back plus your winnings, which are 39 times the amount of the bet”, said the bookie. “Are you playing? I don’t have the whole day!”

The Professor thought for a few moments and then placed a bet on each of the nine horses, all to win.

“You might as well give me my winnings now”, said the Professor.

“The race hasn’t been run yet!”

“That doesn’t matter, when it’s finished, I’ll have an extra \$200”.



How much did the Professor bet on each horse?

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:

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