Problem of the Week
Number Five
February 24, 2014

We have reached the halfway point of this semester's festivities, but we have not yet mentioned the werewolves I promised at the start of the term. We rectify that now! Incidentally, have you ever wondered what the "were" in "werewolf" means? Well, it turns out that "were" is an Old English word meaning "man." That is why a werewolf is a man who can turn into a wolf.

Of course, since I am sure we have all seen *Young Frankenstein*, we also know that "werewolf" is the question you ask when you want to provoke the reply, "There, wolf." As in:

> Inga: Werewolf!
> Dr. Frankenstein: Werewolf?
> Igor: *(Pointing to his right.)* There.
> Dr. Frankenstein: What?
> Igor: There, wolf. *(Pointing straight ahead.)* There, castle.
> Dr. Frankenstein: Why are you talking that way?
> Igor: I thought you wanted to.
> Dr. Frankenstein: No, I don't want to.
> Igor: *(Shrugs.)* Suit yourself. I'm easy.

Good stuff! And you know what else is good? This week's problem:

While walking on the island of knights and knaves, you meet Neelix, Odo and Poirot. You happen to know that exactly one of them is a werewolf. Neelix says, "Poirot is a werewolf." Odo says, "I am not a werewolf." Poirot says, "At least two of us are knaves." Is the werewolf a knight or is he a knave? Also, if you are choosing a travelling companion on a night with a full moon, and if you would rather not go walking with a werewolf, than who should you choose as your companion?

Have fun mulling that over. Also, please notice what is written on the other side of the page $\Longrightarrow$

Solutions are due to Jason Rosenhouse by 5:00 on Friday, February 28. Please write your solution clearly in the space below. Place your name, e-mail address, and the section numbers and professors of any math courses you are taking, in the upper right corner of the front of the page. One weekly winner will receive a five-dollar gift card from Starbucks. Please make sure that the answer to the problem is displayed clearly and prominently. ***Keep in mind, however, that to be considered correct, your answer to the problem must be accompanied by a clear, concise explanation that proves that your answer is the only one possible.*** *Problems are available at the bulletin board outside Roop 119, and also at the website:*

http://educ.jmu.edu/∼rosenhjd/POTW/Spring14/homepage.html