Problem of the Week Number Ten April 10, 2017

Folks, this is it. The Final Problem. Not to be confused with the Sherlock Holmes story of that title. That's the one where Holmes and Moriarty have their fateful clash at the top of Switzerland's Reichenbach Falls. Also not to be confused with "The Last Question," the short story by Isaac Asimov about a computer trying to determine the meaning of life.

As usual, I have chosen to conclude the semester with a problem possessed of a bit of humor. This week's problem can readily be solved with a bit of patience and trial and error. A properly programmed computer would make short work of it.

But you will not get the full effect until you see the super slick way of doing it. Looked at the right way, this problem can be solved in your head in, oh, let us say twenty seconds. Have a go at it!

Find a triple (x, y, z) of positive whole numbers such that

$$28x + 30y + 31z = 365.$$

Well, that's it for another semester of Problem of the Week. Thanks for stopping by. POTW will make a triumphant return in the fall. When you think you have the problem figured out, follow the instructions below.

Submissions are due to Jason Rosenhouse by 5:00 on Friday, April 14. Solutions, complete with a brief explanation, should be written on the back of an official POTW handout. 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. Solutions will be posted at the POTW website:

http://educ.jmu.edu/~rosenhjd/POTW/ Spring17/homepage.html