## Problem of the Week Number One September 5, 2016

In 1966, the philosopher duo Simon and Garfunkel noted, "Time, time, time. See what's become of me." (What? You thought it was the Bangles?) Very deep. What *has* become of me, or any of us for that matter? Is time a fourth dimension, carrying us forth like the current of a river? Or is it an illusion foisted on us by the relentless march of entropy, as described with such piquancy by the second law of thermodynamics?

It is certainly true that time poses some interesting problems. As do clocks! And that brings us to our theme for the present semester:

## **CLOCK PROBLEMS**

That's right: clocks. Those things that have faces, but no eyes, and hands, but no arms. Without fingers, they point, and without feet, they run.

So many questions to choose from! What time is it when the clock strikes thirteen? (Time to get a new clock, obviously.) Why did the chemist put a clock in his beaker? (He was looking for a timely solution.) What do you call a grandfather clock? (An old timer.) Why did the child throw his clock out the window? (He wanted to see time fly.) Had enough? Me too. Happily, it's time for our first problem. (See what I did there?)

Draw two straight lines on the clock face below so that the sum of the numbers in each of the resulting sections is the same.



Some trial and error is unavoidable, but you might find that a bit of cleverness can quickly narrow down the possibilities.

When you think you have unraveled that little bagatelle, follow these instructions to the letter:

Submissions are due to Jason Rosenhouse by 5:00 on Friday, September 9. Solutions 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 this website, by the Monday after the problem is due:

http://educ.jmu.edu/~rosenhjd/POTW/Fall16/homepage.html