

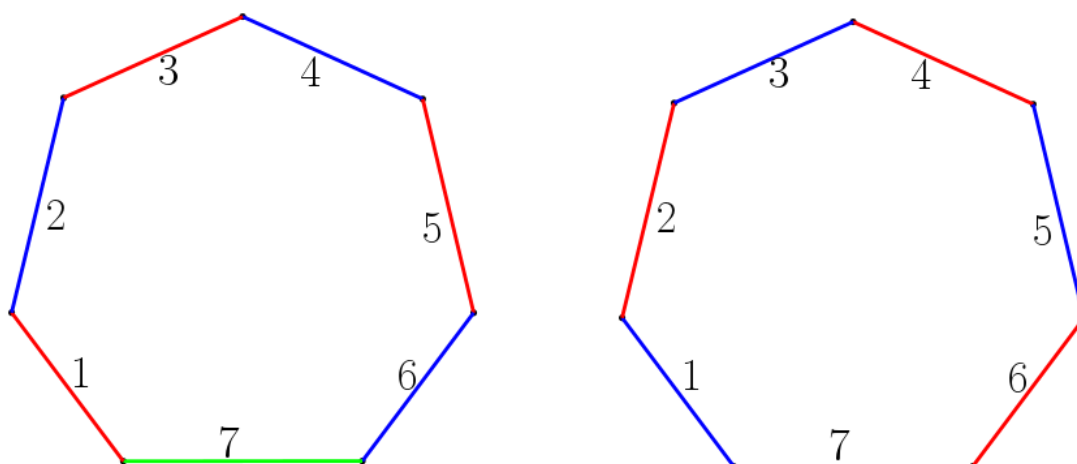
DEPARTMENT OF MATHEMATICS

Math Club



## Michigan Epsilon Chapter of Pi Mu Epsilon

### Problem of the Summer



Suppose you are given a septagon with its edges colored red, blue, and green (as shown on the left). You want to change the coloring to look like the one on the right. You are only allowed to change the color of one edge at a time, and you are never allowed to have two edges of the same color touching each other. You may only use the colors red, blue, and green.

Is it possible to start with the coloring on the left, and end with the coloring on the right?

Please turn in your solutions to Dr. Patrick Bennett, by noon on **Friday August 30, 2019**. Strive for clarity, neatness and legibility! Solutions may be turned into the Math Dept office in **3319 Everett Tower**. Please include your name and email address. Electronic submissions may be sent to [patrick.bennett@wmich.edu](mailto:patrick.bennett@wmich.edu). If you are currently taking a math class, please include the instructor's name and the course number.

<http://www.wmich.edu/mathclub>