

2014-15 University of Utah Undergraduate Problem Solving Contest

Problem 1

Due September 23, 2014, 5:00 PM

There are four numbers that, via addition or subtraction of (not necessarily all of) those numbers, the first 40 integers (i.e. the integers 1 through 40) can be formed. What are the four numbers?

In the spirit of UPSC, you should not use the internet or look up the solution in a book. Please include your **name, student ID number, and email address** on your solution. Grading will proceed more quickly if your final answer is written clearly at the beginning of the first page of your solution, followed by your reasoning.