Problem of the Week

Problem C

Group Work

Piero has 7 tiles, each with a different integer from 1 to 7 written on it. There are many ways in which he can separate his tiles into groups, where each group contains at least one tile. For example, he can separate his tiles into 3 groups as shown.

The sum of the numbers in each of these groups is 13, 10, and 5, respectively.

Piero then separates his tiles into different groups and notices that the sum of the numbers in each group is the same. In how many different ways can Piero separate his tiles into at least two groups so that the sum of the numbers in each group is the same?

Themes: Computational Thinking, Number Sense