1. Compute the sum of sharp angles at all five nodes of the star below.

2. Arrange the integers from 1 to 15 in a row so that the sum of any two consecutive numbers is a perfect square. In how many ways this can be done?

3. Prove that if $p$ and $q$ are prime numbers which are greater than 3 then $p^2 - q^2$ is divisible by 24.

4. A city in a country is called Large Northern if comparing to any other city of the country it is either larger or farther to the North (or both). Similarly, a city is called Small Southern. We know that in the country all cities are Large Northern city. Show that all the cities in this country are simultaneously Small Southern.

5. You have four tall and thin glasses of cylindrical form. Place on the flat table these four glasses in such a way that all distances between any pair of centers of the glasses’ bottoms are equal.