1. **A sticky problem**

![Diagram of four squares and eight cubes]

a. Transform the four squares into three squares by changing the location of three sticks. There cannot be any leftovers.
b. Transform the eight cubes into six cubes by changing the location of ten faces. Again, leftovers are not allowed.

2. **Flag stuff**

The area of a Scandinavian flag is $T = 100 \text{ cm}^2$. The area of the vertical stripe is $T_v = 10 \text{ cm}^2$ and the area of the horizontal stripe is $T_h = 20 \text{ cm}^2$. What is the area $t$ of the intersection of the two stripes?

3. **A question of fairness**

Four sons inherited a square field of land with four trees as shown below. They wanted to divide the land into four pieces of the same size and shape, so that each piece contains one of the trees. How can they do this?