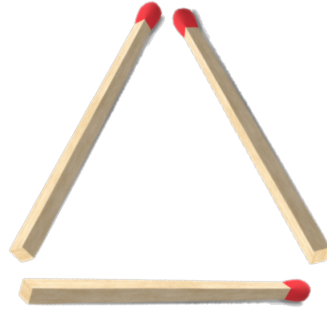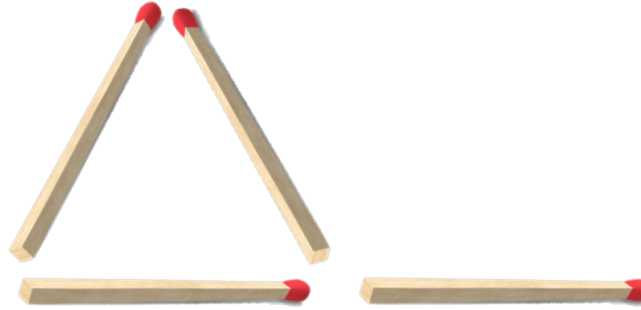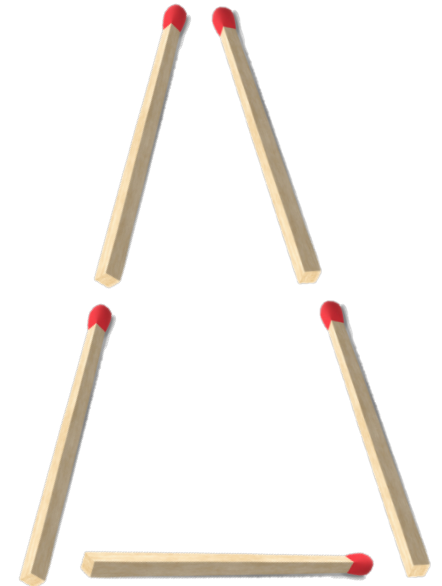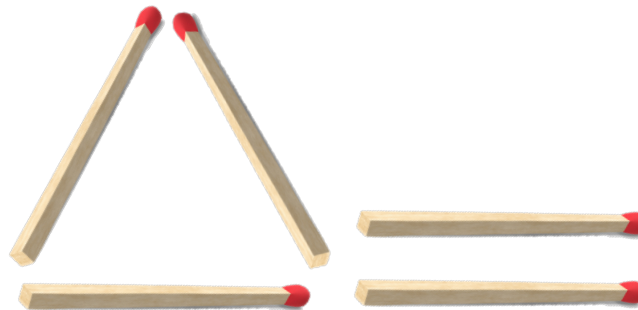# Matchstick Triangles

With 3 matchsticks it is only possible to make 1 triangle.

With 4 matchsticks it is only possible to make 1 triangle and you would have 1 matchstick left over.

With 5 matchsticks it is only possible to make 2 triangles.

How many triangles can you make 6 matchsticks? You do not have to use all the matches each time.

What about 7 matchsticks?

Can you spot a pattern?

How many matchsticks are needed to make the same number of different triangles as there are matches? Not all the matches need to be used each time.