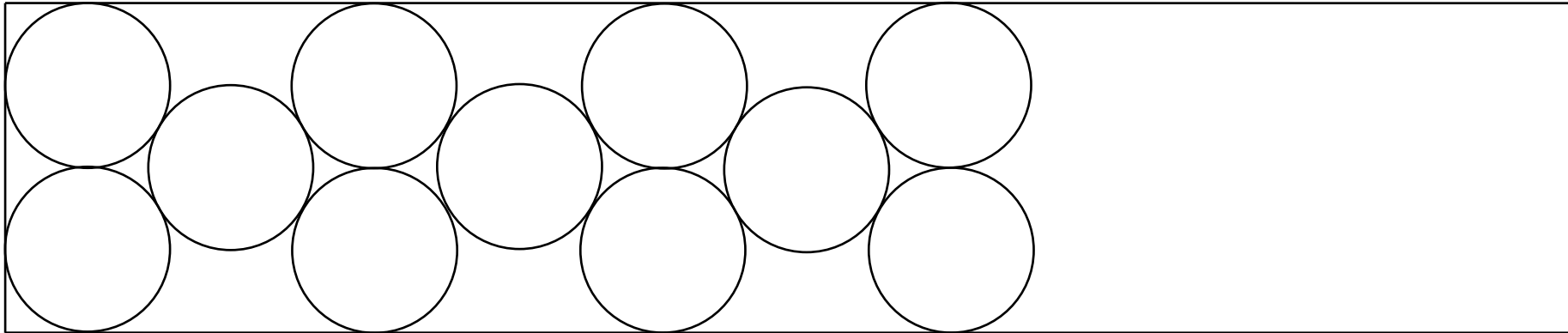


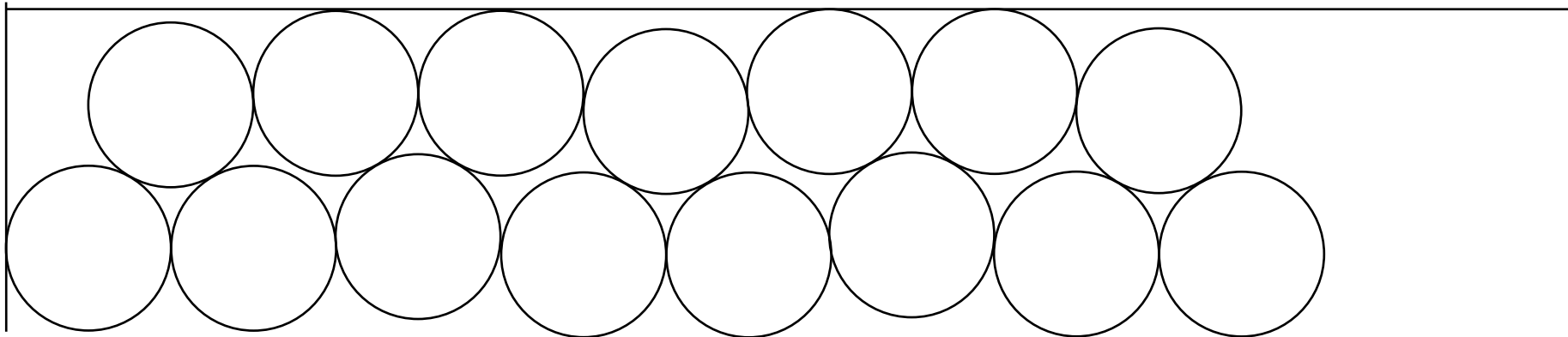
**Question:** What is the maximum number of circles with a diameter of 1 cm that can fit into a rectangle with dimensions 2 cm x 1000 cm?

The answer, perhaps surprisingly, is MORE than 2000 circles.

This attempt obviously doesn't work. How many circles will fit into the rectangle, if we use this pattern?



But this one does. Can you work out how many circles will fit into the rectangle using this stacking pattern?



Here are a few diagrams to help you do the calculations.

