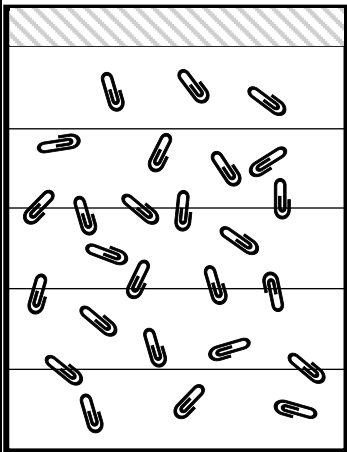
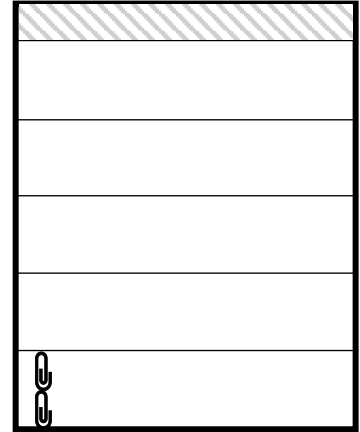


Estimating π

For this experiment you will need a piece of plain paper (A4 is fine but A3 is even better) and some paper clips.

Draw a series of straight lines across the paper. The lines must be separated by the length of two paperclips as shown.

You will end up with a spare portion of paper at the end (shown in grey). This is not needed



Drop your paperclips onto the paper so that they form a random pattern.

Carefully shake the paper so that no paperclips are lying on top of each other.

Count how many of your paperclips are lying across a line.

Ignore any paperclips that fall off the paper or lie in the grey area.

When you have counted the paperclips that lie across a line, perform the calculation:

$$\frac{\text{Total Number of Paperclips}}{\text{Number of Paperclips that lie across a line}}$$

The result should give you an approximate value for π . The more paper clips that you use, the more accurate should your answer be.

The true value of π (to ten decimal places) is 3.1415926535

How close can you get?

