## $\pi =$ 3.1415926535 8979323846 2643383279 5028841971 6939937510 . . .

## The Pi Strip

This gives the value of  $\pi$  to 1000 decimal places. Something you have always wanted (or maybe not).

It is intended for display purposes. But, as the complete strip, or banner, is over 27 metres long when used in full, it might need to be shortened if it is to fit in some classrooms. It may be that the prominent display of the first 10 or 20 decimal places will be considered sufficient for the classroom. If so, do put the continuation dots (from the last page) on as well so that the = sign is justified.

The full strip (printed on brightly coloured paper) would make a very good item for display at a Maths Open Day or similar. The making of it is not too tedious or long a job if organised. Give each pupil a sheet to cut out and glue together the three pieces on that sheet. Then a selected team can soon assemble and glue all the separate pieces together. The small numbers printed at the bottom right-hand corner of each separate strip are intended to ensure that at no time can there be any doubt as to how they should be ordered.

This strip is made in a similar manner to the BIG Number Line.

First, having decided on the required length, print out just the necessary pages. This means the first page after this one (containing the  $\pi = 3$ . strip) and the last page (containing the continuation dots) plus all the others containing the numbers you require.

Second, cut off the **left-hand** edge of each sheet at the dotted line (just inside, to make sure none of it shows in the assembled strip).

Third, cut each sheet into three, using the two long dotted lines.

Now get all the separate strips in order and start sticking! One of the modern 'glue-sticks' is useful here. Think of the strips as being assembled from left to right, one at a time, working in pairs with a 'lefthand strip' and a 'right-hand strip'. On the **back** of a right-hand strip put some glue on the left-hand edge, then turn it face-side up and stick it down on the right-hand edge of the (correct, face-up) left-hand strip. Make sure the dotted line is only just covered, but that the small number in the bottom right-hand corner is not.

It is easier to do than to describe. [It is also easier for those used to hanging wallpaper!] But a good think about the operation, and knowing what the final result should look like, before applying any glue, should make things clear.

The number in the bottom right-hand corner not only ensures that the strips are in order, but also serves to count how many decimal places you have reached - simply multipy it by 10.

Make regular use of the edge of the working-surface to ensure that you are keeping to a straight line - it is all too easy to produce a strip which is curved. Because of possible irregularities in the printing it might be necessary to do a little trimming with scissors along the top and bottom edges of the completed strip to remove any discontinuities in the region of the joins.

Finally, put it up! Blu-tack (or similar) useful for this. Have fun!

... 5820974944 5923078164 0628620899 8628034825 3421170679

© CIMT; University of Exeter 2001 [troIGF:1]



































































