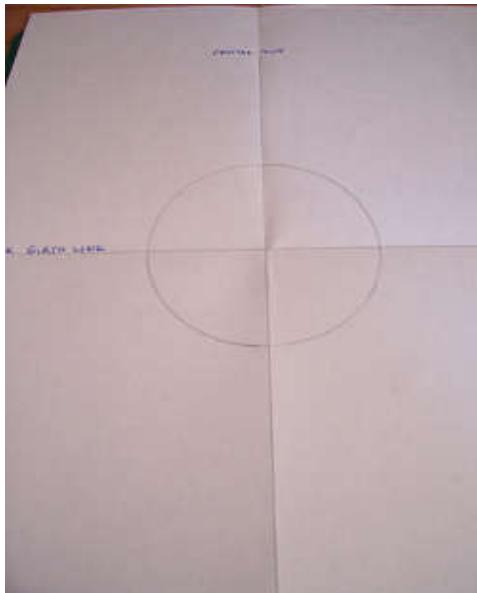


Making a Circular Template with an uneven number of divisions.

By Maureen Williams



Terry asked how to divide a circle into an uneven number of divisions on the front of an egg.

This was my response:

Take a piece of paper and fold it into 4 to represent a vertical line marked on an egg with a centre girth line.

Determine the size of the required circle and use a compass to it on the paper, locating the compass point at the intersection of the two lines.

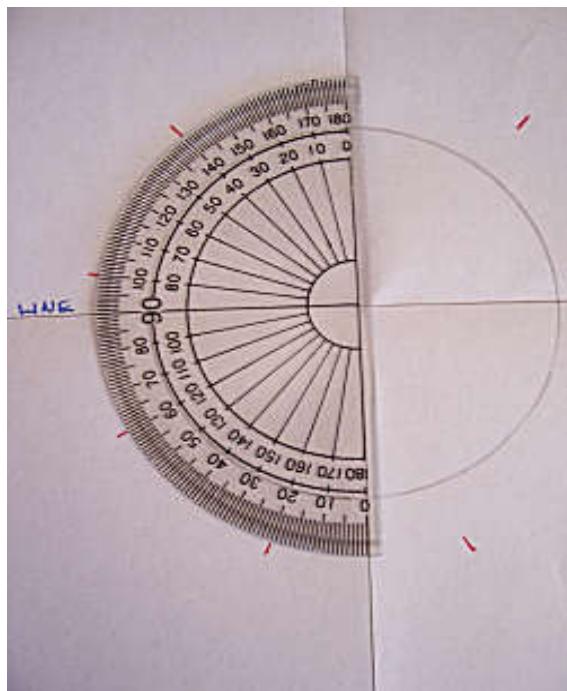
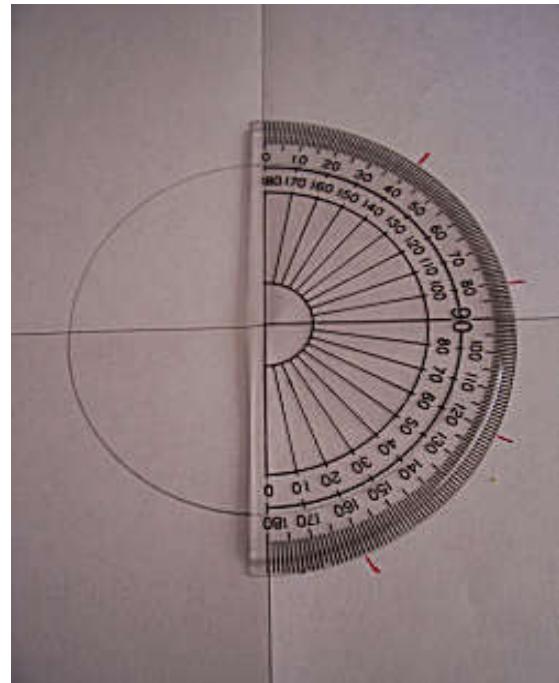
Check the measurement to make sure the size is accurate.

Divide the number of degrees in a circle (360) by the number of the required segments.

For this example I have used 9 segments which equal 40 degrees per segment
 $(9 \times 40 = 360)$

Align the zero straight line of a protractor along the vertical line (i.e. the line that represents the top to bottom of the egg) and the 90 degree line along the girth line.

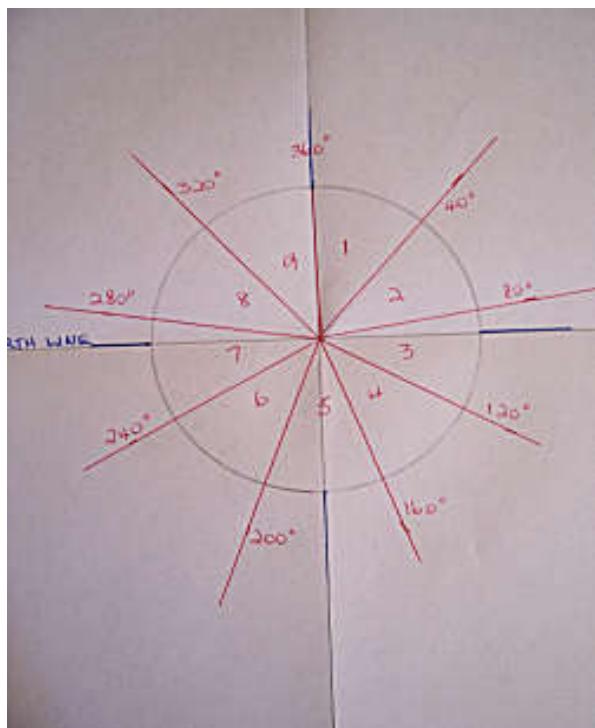
Mark off the 40 degree marks on the outside of the protractor curve.



Swap the protractor to the other side of the circle and repeat the markings, starting from the top of the circle.

Use a ruler to mark from the centre of the circle out to the 40 degree mark on the outside.

Repeat this for all the marks around the circle.

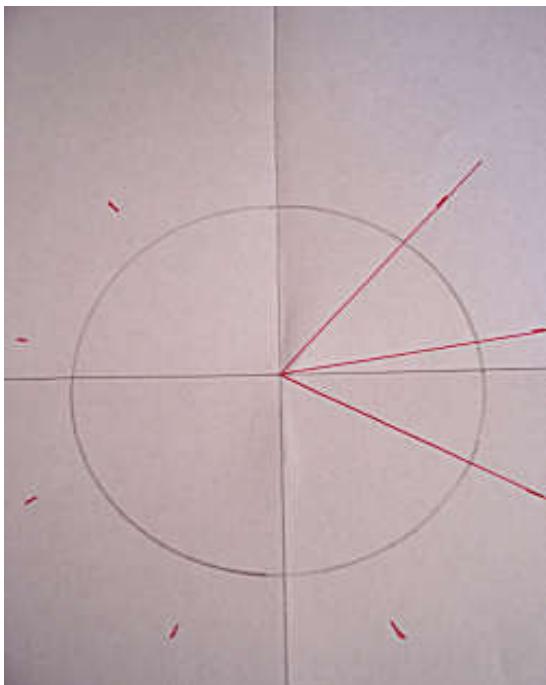


The template could be marked on stiff card-board or a firm plastic for future use.

Align the vertical line and the girth line on the template with the corresponding lines on the egg.

Use a pencil to mark in the required segments on the shell.

A narrow flexible tape measure makes an ideal ruler to mark in the lines from the centre to the outside markings.



The picture to the left shows the number of segments around the circle in red with the original vertical line (at the 360 degree mark) and centre girth line in blue.

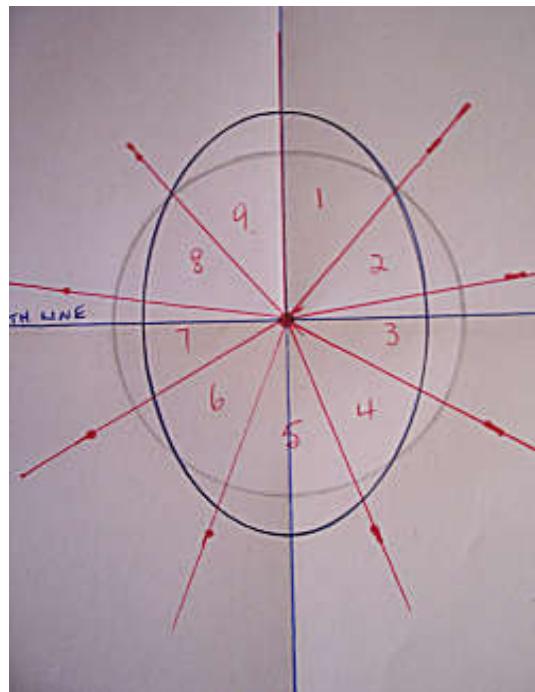
Cut the circle out of the centre to complete the template.



The same principal could be used for any number of even segments by using the various points of the compass.

By the same token you could also make a custom template using irregular measurements for an unusual marking diagram.

Think outside the square - the possibilities are endless, especially for carvers wanting to mark geometric patterns on a shell.



Jenny mentioned she wanted to use an oval - while this would give equal measurements around the oval it does present an interesting concept of markings.

Let's see what you can all come up with from this very interesting question.