**How to convert degrees to radians or radians to degrees.**

**What are 'radians' ?**

One radian is the angle of an arc created by wrapping the radius of a circle around its circumference.

In this diagram, the radius has been wrapped around the circumference to create an angle of 1 radian. The pink lines show the radius being moved from the inside of the circle to the outside:

 

The radius 'r' fits around the circumference of a circle exactly 2 times. That is why the circumference of a circle is given by: circumference = 2r

So there are 2 radians in a complete circle, and  radians in a half circle.

**Converting radians to degrees:**

To convert radians to degrees, we make use of the fact that  radians equals one half circle, or 180º.

This means that if we divide radians by , the answer is the number of half circles. Multiplying this by 180º will tell us the answer in degrees.

So, to convert radians to degrees: 

**Converting degrees to radians:**

To convert degrees to radians, first find the number of half circles in the answer by dividing by 180º. But each half circle equals  radians, so multiply the number of half circles by .

So, to convert degrees to radians, multiply by , like this:    