Pi (**π**)

|  |  |  |
| --- | --- | --- |
| http://www.mathsisfun.com/numbers/images/pi-circle.gif |  | Draw a circle with a **radius** of 1.  The distance half way around the edge of the circle will be **3.14159265...** a number known as **Pi** |

|  |  |  |
| --- | --- | --- |
| Or you could draw a circle with a **diameter** of 1.  Then the **circumference** (the distance all the way around the edge of the circle) will be **Pi** |  | http://www.mathsisfun.com/numbers/images/pi-circle-diam.gif |

|  |  |  |
| --- | --- | --- |
| Pi |  | **Pi** (the symbol is the Greek letter **π**) is:  *The ratio of the****Circumference****to the****Diameter****of a Circle.* |

|  |  |
| --- | --- |
| In other words, if you measure the circumference, and then divide by the diameter of the circle you get the number **π**  It is approximately equal to:  **3.14159265358979323846…**  The digits go on and on with no pattern. In fact, **π** has been calculated to over two quadrillion decimal places and still there is no pattern. | http://www.mathsisfun.com/numbers/images/pi.gif |

Example: You walk around a circle which has a diameter of 100m, how far have you walked?

|  |  |
| --- | --- |
| http://www.mathsisfun.com/numbers/images/pi-circle-ex1.gif | Distance walked = Circumference = **π** × 100m = 314.159...m  = **314m** (to the nearest m) |

Approximation

A quick and easy approximation for **π** is 22/7

22/7 = **3.1428571...**

But as you can see, 22/7 is **not exactly right**. In fact **π** is not equal to the ratio of any two numbers, which makes it an [irrational number](http://www.mathsisfun.com/irrational-numbers.html).

A better approximation (but stll not exact) is:

355/113 = **3.1415929...**  
*(think "113355", then divide the "355" by the "113")*

Remembering

I usually just remember "3.14159", but you can also count the letters of:

*"May I have a large container of butter today"  
3 1 4 1 5 9 2 6 5*

To 100 Decimal Places

Here is **π** with the first 100 decimal places:

|  |
| --- |
| 3.14159265358979323846264338327950288419716939937510 58209749445923078164062862089986280348253421170679... |