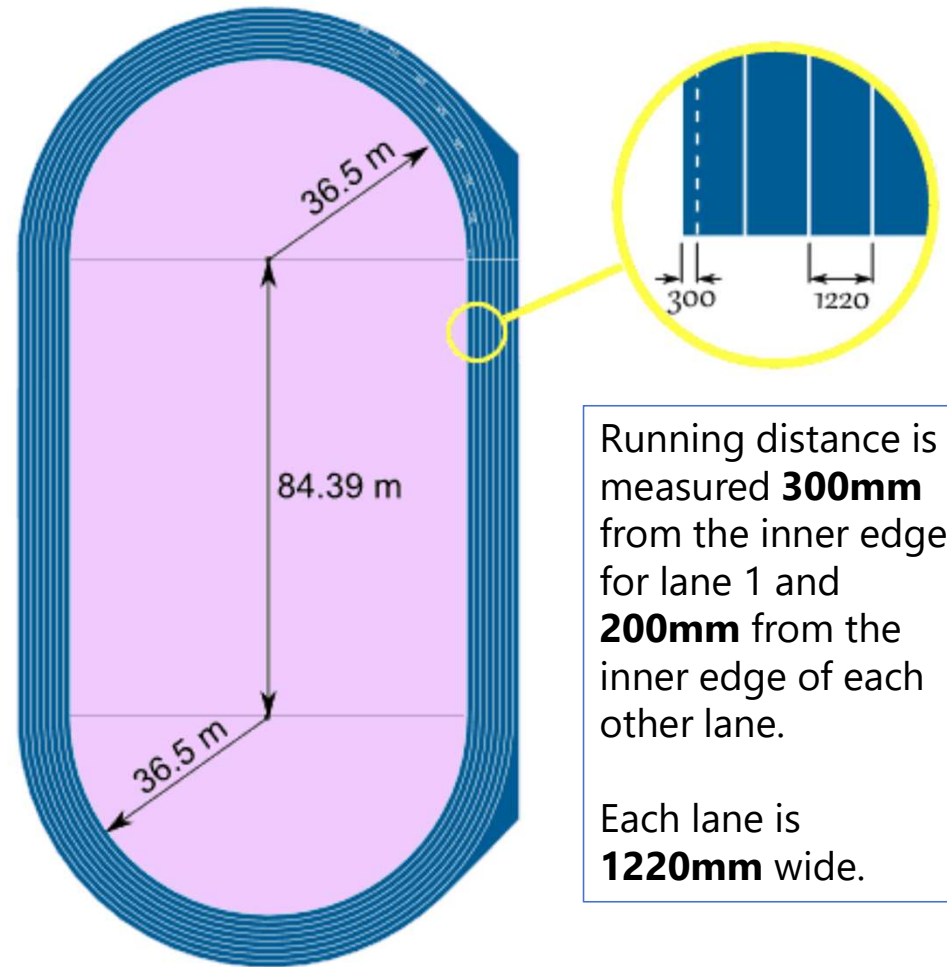


A Staggering Distance

Ever wondered why athletes do not all start from the same part of the track?

The distance around a running track is longer as you go further out from the innermost lane. This is why the athletes' starting positions are staggered.

How much longer is one circuit in the outermost lane than one lap in the innermost lane?



Running distance is measured **300mm** from the inner edge for lane 1 and **200mm** from the inner edge of each other lane.

Each lane is **1220mm** wide.

*Did you know? The shape of a running track has several names including **stadium** and **discorectangle**! It is formed by a rectangle with a semi-circle at each end.*

A Staggering Distance: Working out table

Use this table to help you calculate the distance around each lane of the running track.
Lanes 1 and 2 have been completed to help you get started.

Lane	Radius	Circumference	Total distance
1	$36.5\text{m} + 0.3\text{m} = 36.8\text{m}$	231.22m	400m
2	$36.5\text{m} + 1.22\text{m} + 0.2\text{m} = 37.92\text{m}$	238.26m	407.04m
3			
4			
5			
6			
7			
8			