



THE FASTEST LAP

In 1907 a $2\frac{3}{4}$ mile long motor racing circuit, called Brooklands, was opened near Weybridge in Surrey. It was closed to motor racing during World War I and used for the construction of military aircraft.

In 1920, 100 years ago, motor racing resumed at Brooklands and even the real Chitty Bang Bang raced there! True story so far...but now for the fun part...

Around this time, Miss Flux Capacitor would race her car Zoomy at Brooklands. A few days before one particular race Miss Flux Capacitor wanted to test how fast she could get round the track, but unfortunately due to an oil spill part of the track was closed. In order to get an idea of how fast she could complete a lap, her friend Mr Pluto Nium put 5 flags, each 250 metres apart, along a stretch of the track called Railway Straight.

Mr Pluto Nium then stood on Byfleet Bridge (which gave him a great view of Railway Straight) and timed how long it took Miss Flux Capacitor to drive from the 1st to the last flag. He timed it to be exactly 18 seconds.

Using the fact that 1 mile is approximately 1.6km, Mr Pluto Nium worked out Miss Flux Capacitor's average speed in miles per hour. What did he work it out to be?

He then calculated how long it would take Miss Flux Capacitor to complete 1 lap of Brooklands' circuit.

How long did he calculate it to be in minutes and seconds?