

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

Shreve M. Archer, IV

Project Number

J1202

Project Title

Does a Go-kart Have a Faster Lap Time with Hard Compound Tires, or Soft Compound Tires?

Abstract

Objectives/Goals To prove my theory that soft tires have a faster average lap-time than hard compound tires on a go-kart on an average go-kart track.

Methods/Materials

I drove a go-kart for 5 laps on the go-kart track, (being timed by my mechanic) averaged all of the lap times, then recorded them. I did this with both hard and soft tire compounds. We took tires temperatures, track temperatures, and tire pressures also. Also, to prove my result, I tested on two seperate tracks, bu used the exact same methods and materials.

Results

I found that soft compound tires had a faster lap time than hard compound tires on an average go kart track.

Conclusions/Discussion

I conclude that soft compound tires have a faster average lap time than hard tires.

Summary Statement

My project is about weather soft compound tires have a faster average lap time than hard compound tires or visa versa on an average go-kart track.

Help Received

My mechanic took pictures of me out on the track and lap timed me.