Wave Assignment

Using Ricardo Wave, plot piston velocity for the various rpm.

What are the effects on brake torque and efficiency if we vary the burn duration and location of 50% burn.
plot linear *pv* diagram and log *p* log *v* diagram, for the different burn duration and 50% burn point.

Check the effects of intake or exhaust runner lengths on engine torque, power and volumetric efficiency, i.e. reduce and increase the lengths of the runner lengths by say 20% each way.

If you want to check some other effect on an engine please discuss with lecturer first for feasibility.

You can use examples supplied with wave for this exercise or the example FC03g on my webspace. Note that for FC03g you have to make the valve model get the lift and cd of the valves from the downloadable files also on my webspace.

Save your model and the sum file on a cd and give them to me.

This is not a group project, i.e. you need to give me your model your sum file and your results.

Mario Farrugia 24 October 2013