

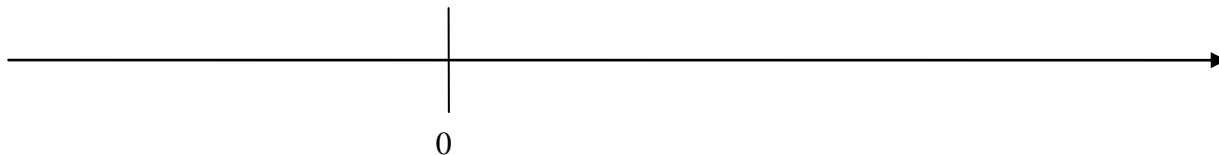
### Prelab 3

Your task is to model the motion of a car with its brakes applied (A model is a set of representations that accurately describes a particular situation). To do this, you will have to set up a specific situation with reasonable numerical values, i.e. could apply to an actual situation.

In constructing a model, what assumptions would you make and why?

What would be the directions of the various physical quantities that are used in modeling the system?

Accurately construct a motion diagram for your model.



Accurately draw position-time and velocity - time graphs which are consistent with each other.

From your graphs determine the acceleration of the car.