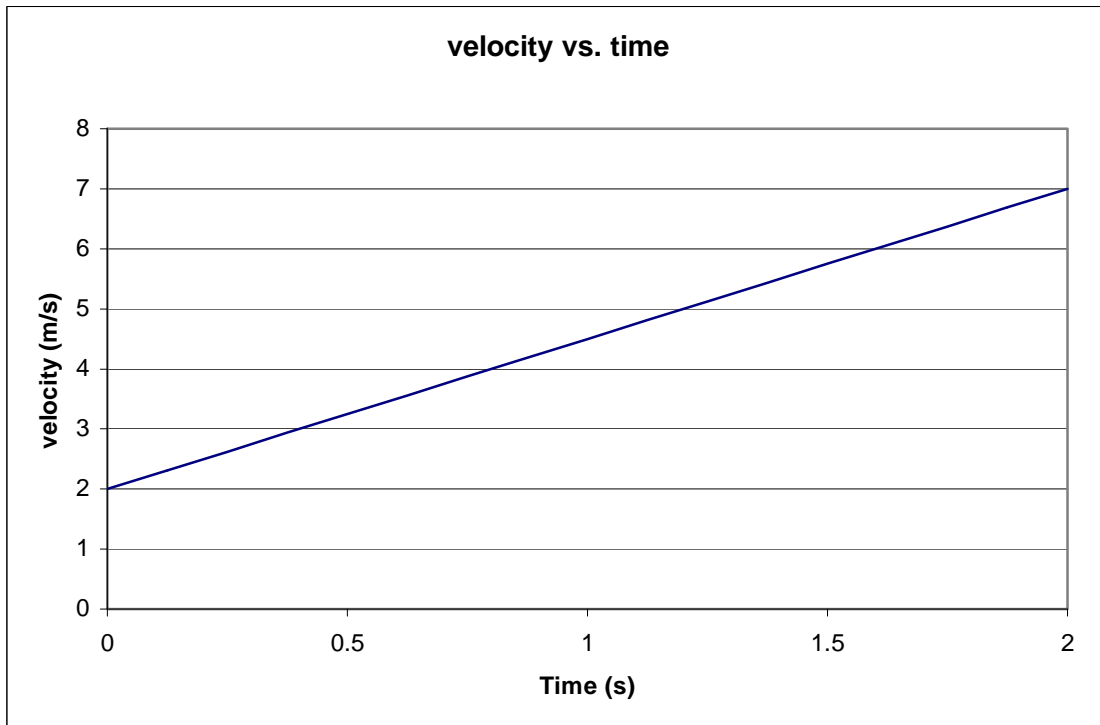
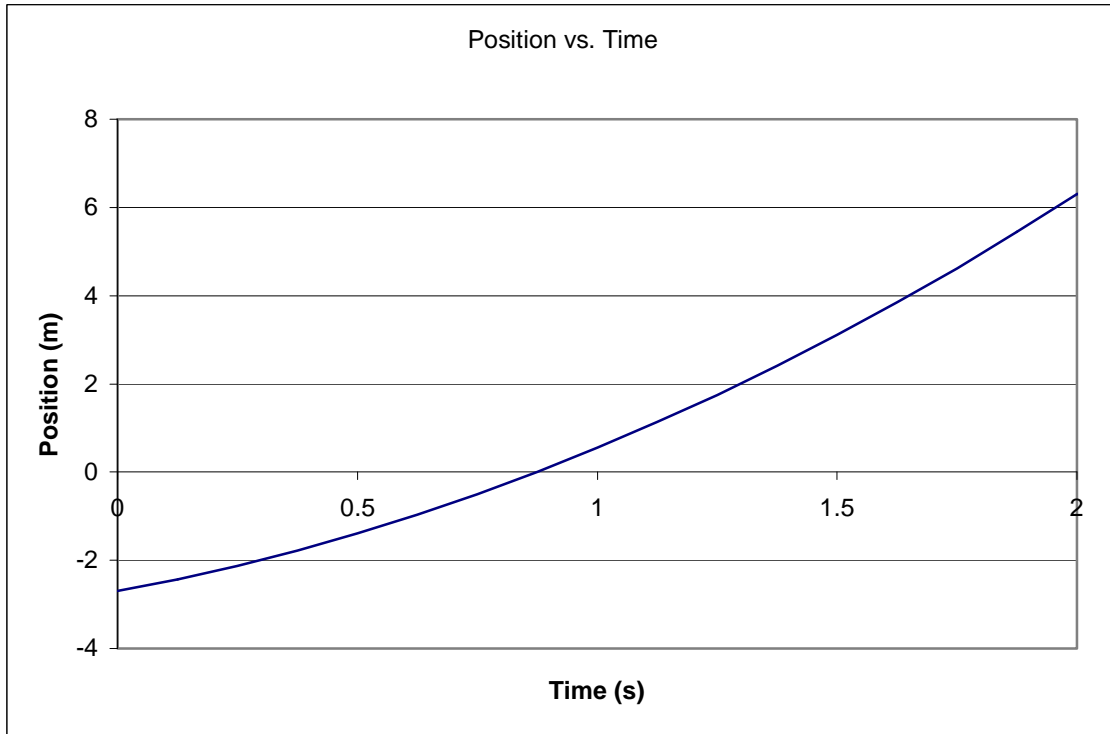


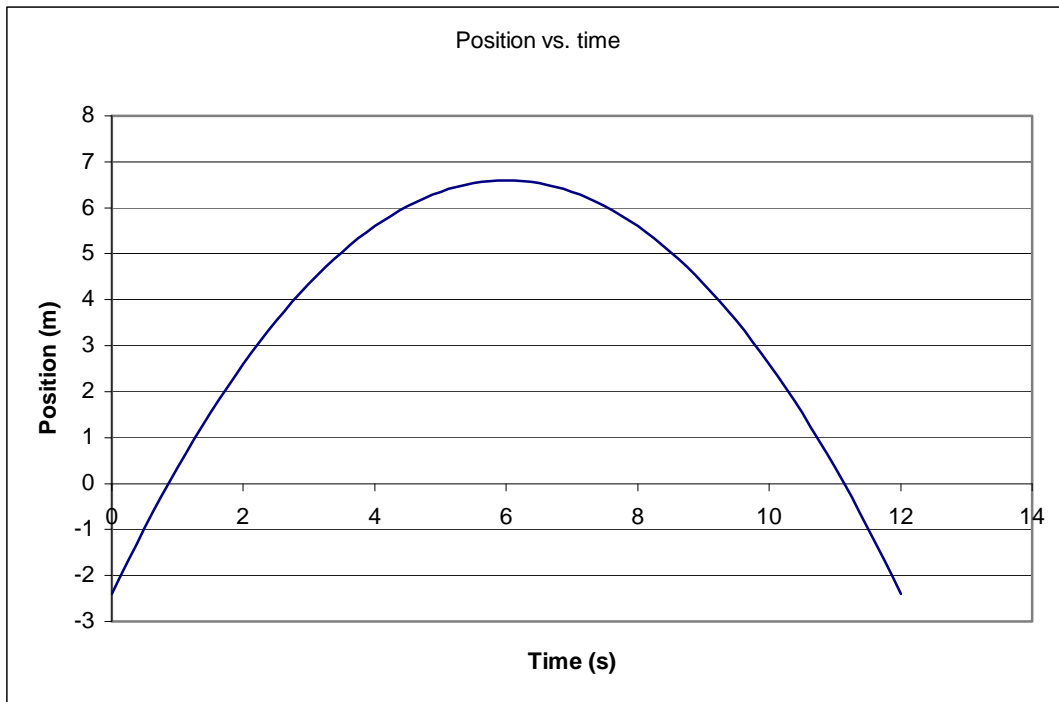
## Pre-lab 4

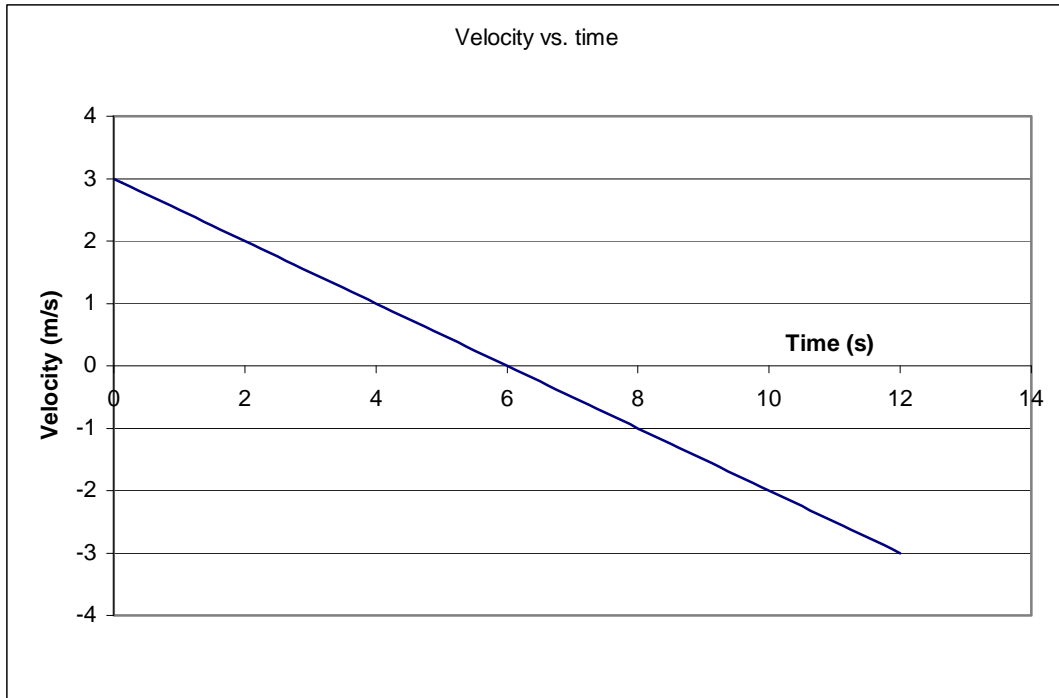
Your task is to analyze a model built by student X concerning the motion of a toy car with a constant force from the engine to push it forward. There are two different situations recorded. Situation 1: A 2.5 N exerts a force on a 1kg car on a horizontal frictionless plane produces these position-time and velocity-time graphs.



A) Describe the motion situation (acceleration, direction of acceleration, initial velocity, etc.) that would produce the position - time and velocity – time graph. Your description must be both qualitative and quantitative

Situation 2: A 1kg block starts at the left of a frictionless plane and a force of 0.5N is exerted on the block. The position-time and velocity-time graphs for the block are shown below.





- B) Describe the motion situation (acceleration, direction of acceleration, initial velocity, etc.) that would produce the position – time and velocity - time graphs. Your description must be both qualitative and quantitative