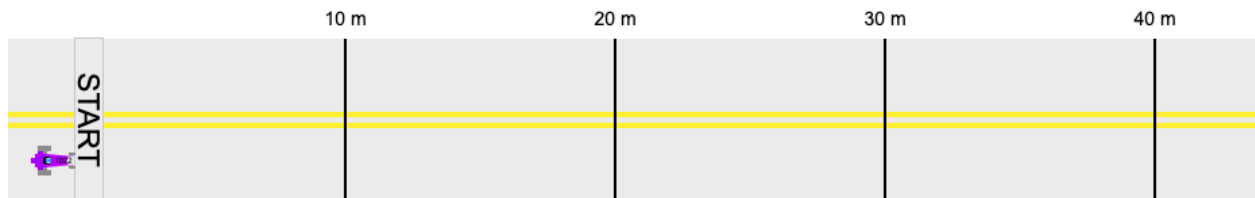# Car Acceleration

Step 1: The car below starts at rest. Write down the acceleration that the car will have and how long that acceleration will last.

Step 2: Fill in your variables into the chart below and then use your equations of motion to find the unknown values. Show all of your work below.

Δx	
v_i	
vf	
a	
t	

Step 3: Enter your answers into the program to make sure you did everything correctly

Step 4: (Optional) Assume that the car didn't start at rest but instead was rolling along at 5 m/s when they started their acceleration. They stop accelerating when they reach the same top speed they had in step 2. How much time would they need to acceleration to reach this speed and how much ground would they cover while accelerating?

Δx	
v_i	
vf	
a	
t	