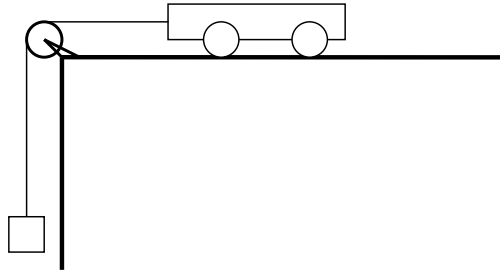


Pre-lab 7

A Hot Wheels car, whose mass is 200g is hauling a mass block of 150g along a flat table surface with a string as shown in the graph below. Assume the car *and* the attached mass is moving with an initial velocity of 1.7 m/s. A student predicts that the car will travel a maximum distance of 42 cm. Is this a reasonable prediction? Explain fully.



Same as previous question, what if the initial velocity of the cart and the mass is 2.7 m/s? Explain fully please.

Hint: considering the work and energy theorem will make your calculation much easier.