

Physics 152
Prelab 8

Consider the situation in which a cart on a horizontal track is attached to the left end of the track by a short piece of string, and then on the right end of the track, a string goes over a pulley and is tied to a 0.5 kg mass. The cart has a mass of 800 grams. The strings are parallel to the track. At some point, the short string will be cut.

Pictorial representation

Physical representation(s)

Compare the tension in the long string, before and after the short string is cut. Explain why the tensions are either the same, or different.