Physics 152 Prelab 9

You have a cart on a horizontal track. This cart (M_c=800 grams)is attached to a string which goes over a very low mass, low friction pulley to a second mass (m_h=20 grams) hanging over the edge. The hanging mass falls for a distance of h (10 cm) and then hits a platform.

Write a symbolic expression in terms of M_c, m_h, h and g for the velocity of the cart after the hanging mass has hit the platform.

Determine the velocity of the cart after the hanging mass has hit the platform.