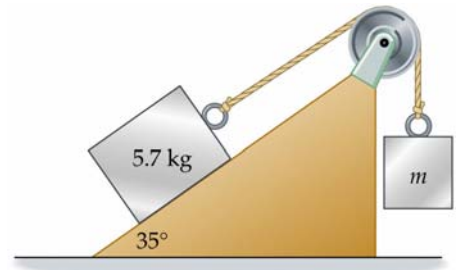## Physics 151 Class Exercise: Multi-Step Problems 2

1.   A 1.34 kg block of wood is sitting on a wooden table and the coefficient of kinetic friction between the two surfaces is 0.24. Malcolm throws his giant 48 g wad of bubble gum which hits the block traveling horizontally with a velocity of 14.2 m/s and sticks to it.   After the impact, how far does the block slide across the table?

Answer:	

2.   (a) Use dynamics and kinematics to determine the speed of the blocks after little m has fallen 0.25 m. Block m has a mass of 6 kg and the incline is frictionless.

Answer:

(b) Use conservation of energy to verify your result to part (a).

Answer: