Example

Blocks 1 and 2 of mass m_1 and m_2 , with $m_1 < m_2$, are connected by a massless inextensible string over a massless frictionless pulley. Using the work-energy method, what is the speed of the blocks after block 1 has been raised through a vertical displacement Δy ?



Example

Two blocks A and B (m_A =50 kg and m_B =100 kg), are connected by a string as shown. Assume the pulley and incline are frictionless.

If the blocks begin at rest, what will their speeds be after A has slid a distance s = 0.25 m?

