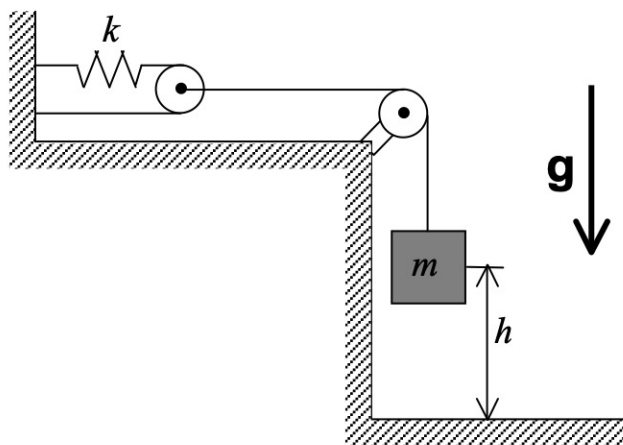**Homework H.4.J**

Given: A block with mass m is attached to a pulley system. The other end of the cable is attached to a spring with stiffness k, as shown in the diagram. The spring is initially unstretched when the block is at a distance h from the ground. The system is released from rest. Assume all pulleys are massless.

Find: Determine the velocity of the block when it hits the ground.

Use the following parameters in your analysis: $m = 200$ kg, $k = 3$ N/m and $h = 0.75$ m.