

Name:	
ID:	
Total Score (out of 10 pts):	

-4/10 points for attending-

Question 1 (6/10 points)

The small mass m has an initial velocity of \vec{v}_0 as shown in the figure below. The L-shaped block of mass M rests on a frictionless surface and a massless horizontal spring is attached to it with a stiffness of k . What is the maximum compression of the spring when m collides with the spring? (Hint: Think about the velocities of both M and m when maximum compression occurs.)

