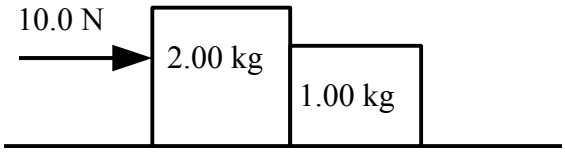
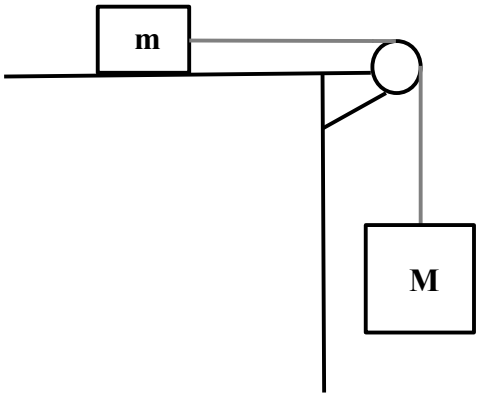
Physics 203 - Section: 06/03/2015 Quiz 2 Name : ….....

For full credit, be sure to show all your work.

1) (1.5 points) A 2.00-kg block is in contact with a 1.00-kg block on a horizontal frictionless surface as shown in the figure. The 2.00-kg block is being pushed by a horizontal 10.0-N force as shown. What is the acceleration of each block? What is the magnitude of the force that the 2.00-kg block exerts on the 1.00-kg block?



2) (1.5 points) In the configuration below, m = 2.0kg and M = 3.0kg are connected by a string through a pulley and we assume no friction.



a) Draw all the forces acting on m and M.

b) Calculate the tension T.