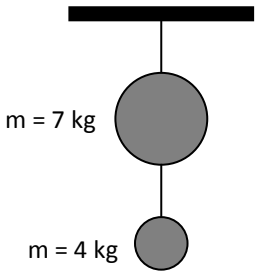
Forces Homework 2

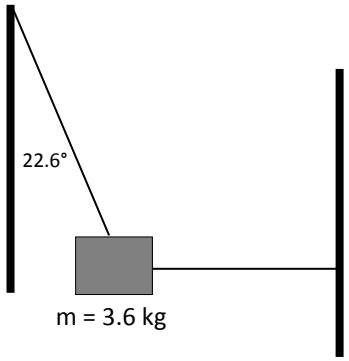
Name: _____

Hour: _____ Date: _____

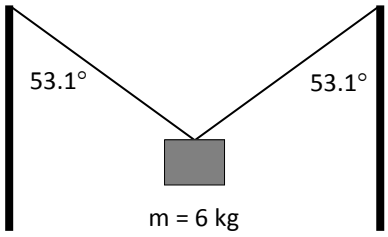
1. Draw a force diagram for each ball and find the tension in the strings.



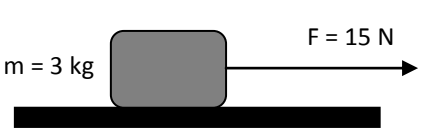
2. Draw a force diagram for the block and determine tension in each string.



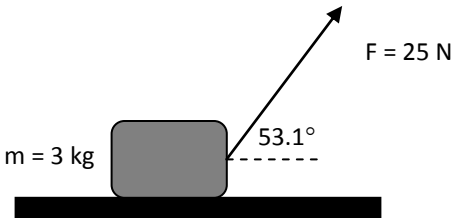
3. Draw a force diagram for the object and find the tension in the string?



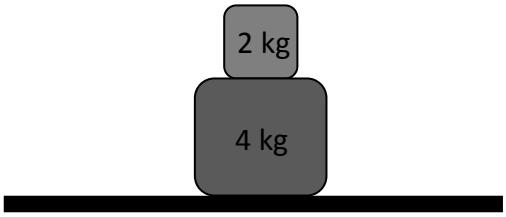
4. A block is pulled across a rough surface at a constant speed. Draw a force diagram for the block and find the normal force and the frictional force exerted on the block by the surface.



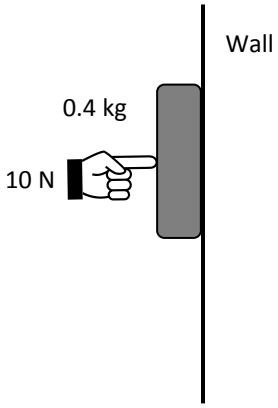
5. A block is pulled across a rough surface at a constant speed. Draw a force diagram for the block and find the normal force and the frictional force exerted on the block by the surface.



6. A 2 kg block sits motionless on top of a 4 kg block. Draw a force diagram for each block. Find the normal force between the surface and the 4 kg block. Find the forces between the blocks.



7. A hand pushes a 0.4 kg block against a wall with a 10 N force. The block remains stationary. Draw the forces diagram for the block and find the normal force exerted by the wall on the



8. Draw a force diagram for the block and find the normal force and the frictional force exerted by the ramp on the block.