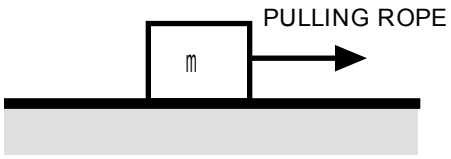
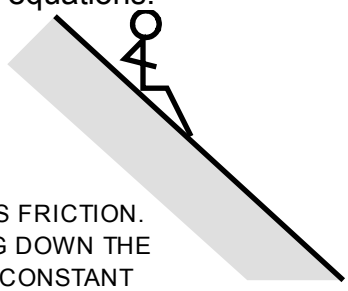
Newton's Laws of Motion– Free Body Diagrams (fdb)

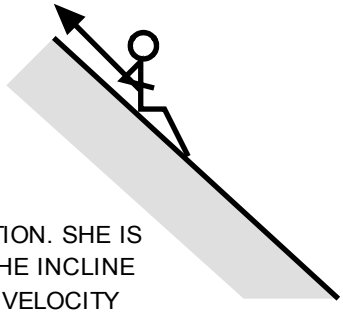
For each case, draw a free body diagram of all the forces acting on the object and write a net force equation for each. Click on the pencil in the top menu and then use the arrow blocks to show the forces. Select Insert->Object->Formula to enter the force equations.



FRICTION, NO MOTION

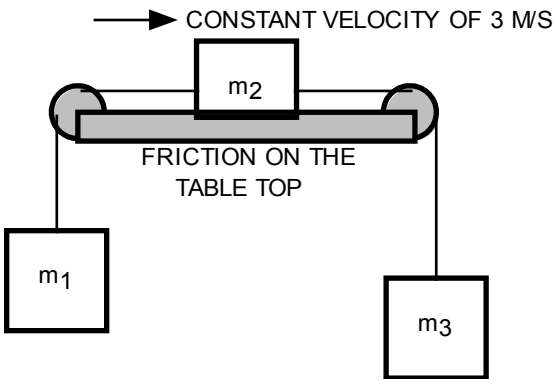


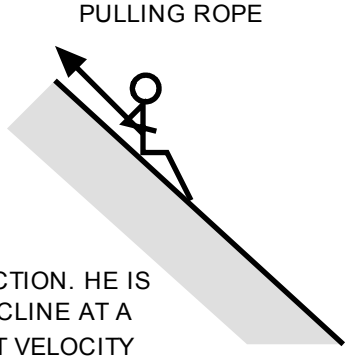
THERE IS FRICTION. HE IS MOVING DOWN THE INCLINE AT A CONSTANT VELOCITY



THERE IS FRICTION. SHE IS MOVING DOWN THE INCLINE AT A CONSTANT VELOCITY

DRAW A FREE BODY DIAGRAM FOR EACH MASS

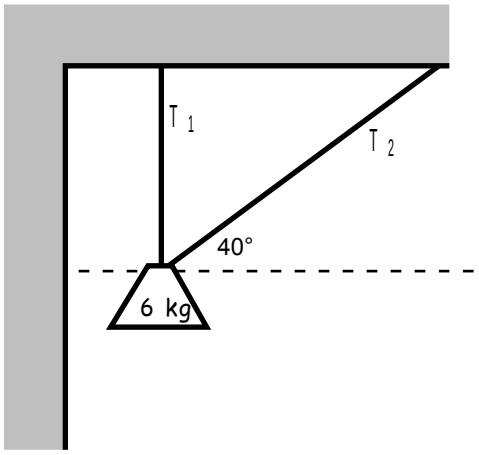


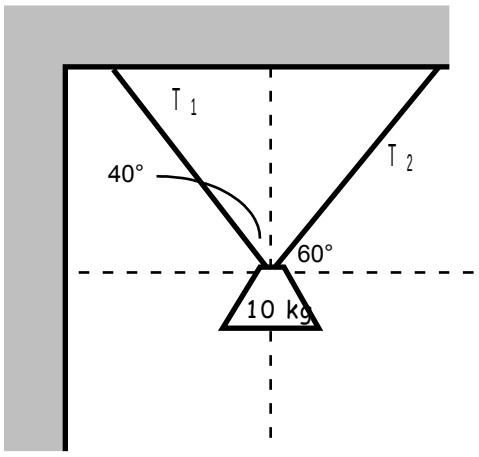


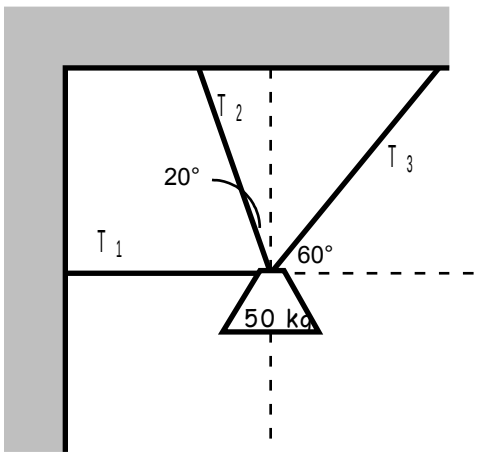
THERE IS FRICTION. HE IS MOVING UP THE INCLINE AT A CONSTANT VELOCITY

Another fine worksheet by T. Wayne
modified by C. Taylor Jan 2010

Newton's Laws of Motion– Free Body Diagrams (fdb)

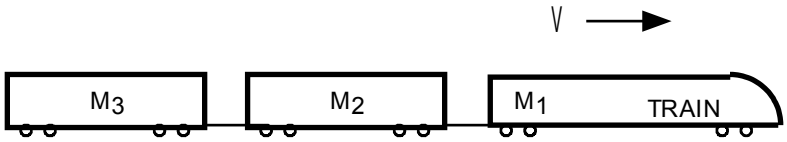






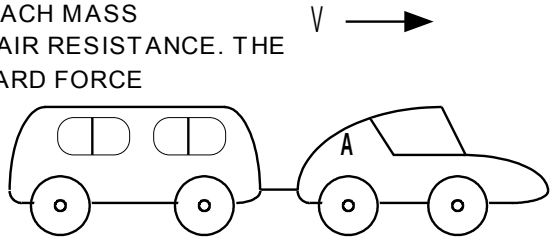
Another fine worksheet by T. Wayne
modified by C. Taylor Jan 2010

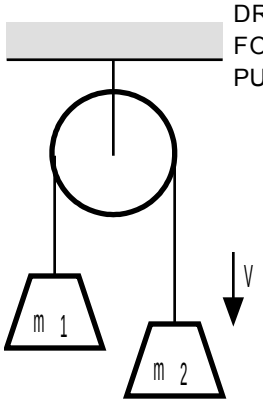
Newton's Laws of Motion– Free Body Diagrams (fdb)



DRAW A FREE BODY DIAGRAM FOR EACH MASS
THERE IS FRICTION WITH THE ROAD. THERE IS AIR RESISTANCE. THE FRONT ENGINE IS SUPPLYING A FORWARD FORCE TO MOVE THE TRAIN.

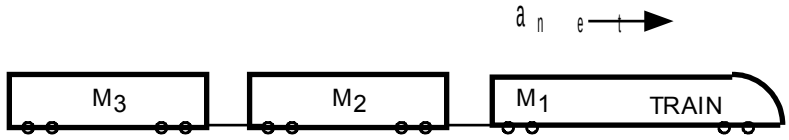
DRAW A FREE BODY DIAGRAM FOR EACH MASS
THERE IS FRICTION WITH THE ROAD. AIR RESISTANCE. THE CAR IS SUPPLYING THE ONLY FORWARD FORCE





DRAW A FREE BODY DIAGRAI FOR EACH MASS AND THE PULLEY.

Another fine worksheet by T. Wayne
modified by C. Taylor Jan 2010



DRAW A FREE BODY DIAGRAM FOR EACH MASS
THERE IS FRICTION WITH THE ROAD. THERE IS AIR RESISTANCE.
THE FRONT ENGINE IS SUPPLYING A FORWARD FORCE

DRAW A FREE BODY DIAGRAM FOR EACH MASS
THERE IS FRICTION WITH THE ROAD. NO AIR
RESISTANCE. THE CAR IS SUPPLYING A FORWARD FORCE