#26

Physics Homework **Name _____**

Date _____ Period _____

Show PAWS

1) A cart is placed on a level surface. The gravitational force on the cart is 150N. The floor pushes up with a force of 150N. A student pushes the cart forward with a force of 250N and there is a frictional force of 55N backward. Draw a free body diagram. Don't forget to label.

2. A box sits on an inclined plane with an angle of 24 degrees. If the box has a weight of 350N find the force pushing the box into and down the plane.

3. A boy pulls his little red wagon by exerting a force of 45N at an angle of 35 degrees above horizontal. Find the vertical and horizontal components of the force.

4. A 50.0kg wagon is pulled up a hill with an incline of 17.8 degrees. A force 140N is applied parallel to the plane to pull the wagon. If the wagon starts from rest, how fast will the wagon be traveling after 25m?

5. Find the time for the wagon in #4 to travel the 25m.