Net Force

The sum of all forces in a given situation.

We use Free Body Diagrams to illustrate the direction of forces.

Ex 1: Bill and Ted are in a tug of war. Bill pulls with 350N and Ted pulls with 250N. What is the net force?

Ex 2: Using the following Free Body Diagram (FBD) find the net force.

Ex 3: What is the net force on a mass of 5.0kg that is being pulled at 30o above the horizontal with a force of 1200N?

Ex 4: What is the acceleration on a 12.0kg mass that experiences 35N to the right and 15.0N to the left?

Ex5: An object remains stationary even though a force of 320N is being applied to it. What must the frictional force be?