

## Newton's 2<sup>nd</sup> Law

$$F=ma$$

The net force on an 8.6 gram object is 7 N. What is the acceleration of the object?

A ball is kicked with a force of 13.5 and accelerates with at a rate of  $6.5 \text{ m/s}^2$ . What is the mass of the ball?

You are pulling a box up a frictionless ramp. The ramp is at an angle of  $25^\circ$  above the horizontal. The box has a mass of 45 kg and you are applying a 250 N force. What is the acceleration of the box?