Newton’s Second Law

F = m \* a

(N) (Kg) (m/s2)

1. A 15 kg object accelerates at a rate of 6m/s2. How much force is needed to do this?
2. How much force is needed to accelerate a 20kg object 25 m/s2?
3. A force of 450N is applied to a 9kg object. How fast will it accelerate?
4. A force of 900 N is applied to a 9kg object. How fast will it accelerate?
5. A force of 1095 N is applied to an object, which in turn causes it to accelerate at a rate of 15 m/s2. What is the mass of the object?
6. An object accelerates at a rate of 23m/s2 when 2369N of force is applied to it. What is the mass of the object?