Acceleration

A= Fnet/m

If your pull is greater than the force of friction the object accelerates.

Acceleration can never be zero.

1. A rubber ball weighs 49N.
   1. What is the mass of the ball? 4.9kg
   2. What is the acceleration of the ball if an upward force of 69N is applied?

Fnet= 20N A= 20/4.9 A= 4.08 m/s^2

1. A small weather rocket weighs 14.7N.
   1. What is its mass? 1.47kg
   2. The rocket is carried up by a balloon. The rocket is released from the balloon and fired, but its engine exerts an upward force of 10.2 N. What is the acceleration of the rocket? Fnet= -4.5 A= -3.06m/s^2