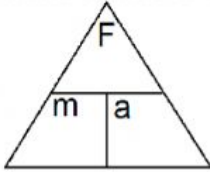
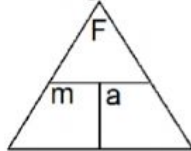


31. A dancer lifts his partner above his head with an acceleration of 3 m/s^2 . The dancer exerts a force of 150N . What is the mass of his partner?



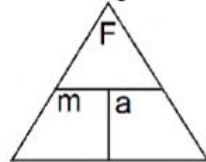
Answer Unit
N kg m/s m/s²

32. A 20-kg ball is accelerated 500 m/s^2 by what force?



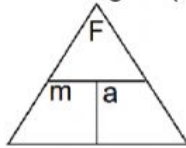
Answer Unit
N kg m/s m/s²

33. If a 100kg water rocket takes off with a force of 500N , what is its acceleration?



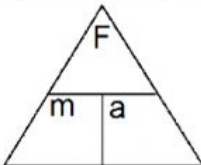
Answer Unit
N kg m/s m/s²

34. The acceleration of gravity is 9.8 m/s^2 on the earth, an object has a mass of 600kg what is its weight? (remember weight is equal to the force of gravity).



Answer Unit
N kg m/s m/s²

35. How much force is needed to accelerate a 200kg truck at a rate of 4m/s^2 ?



Answer Unit
N kg m/s m/s²