### 4.3 Review Questions

1. Determine the Net Force acting on these 2 Kg blocks:

2. Each of the blocks above has a mass of 2 Kg . Calculate the acceleration for each.
3. A 100 Kg crate sits on a factory floor. A worker pushes on the crate with a force of 300 N to the right and the box accelerates to the right at 1.5 $\mathrm{m} / \mathrm{s} / \mathrm{s}$. What is the force of friction acting on the box?
4. A hot air balloon (mass $=600 \mathrm{Kg}$ ) descends at a constant velocity of 8 $\mathrm{m} / \mathrm{s}$. What is the sum of the forces acting upward on the balloon?
5. A crate is being pushed across the floor at a constant velocity. If a person has to push with 500 N of force, how much friction must the floor be applying to the crate?
