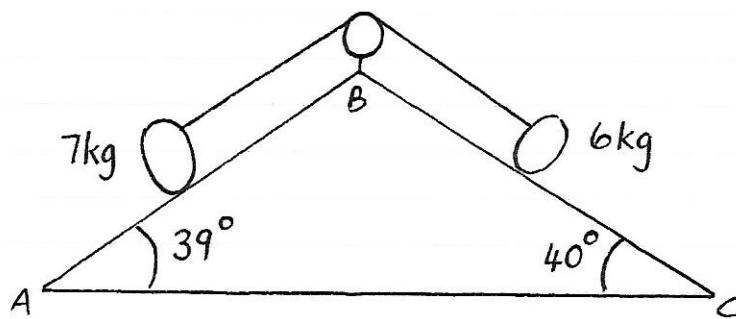


Double Inclined Plane : friction Involved

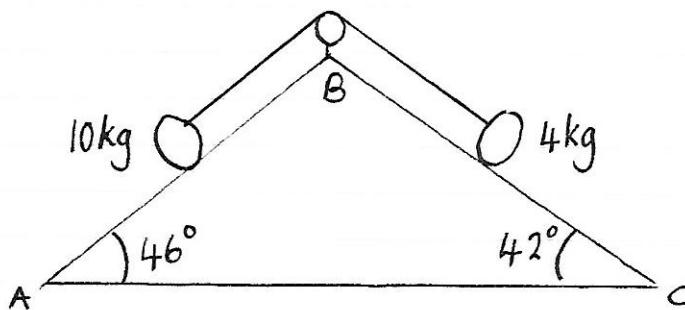
1)



- The system is on the point of moving.
- Slope AB is rough, μ is unknown.
- Slope BC is smooth

Calculate μ and indicate the direction of motion.

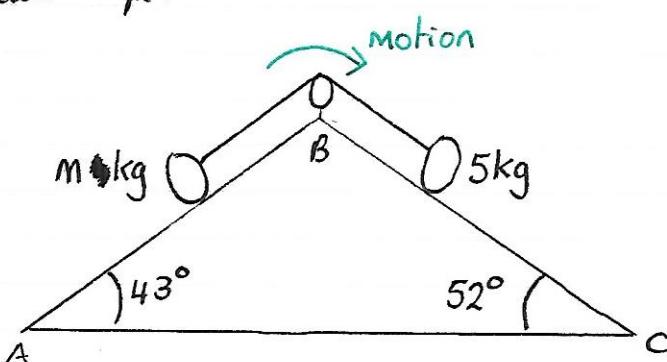
2)



- The system is on the verge of moving
- slope AB is rough
- slope BC is rough
- The coefficient of friction is the same for BOTH slopes

Calculate μ .

3)



- The system was released from rest and the motion direction is as shown
- slope AB and BC are both equally rough with $\mu = 0.2$
- The acceleration of the system is 0.5 m/s^2 .

Calculate the value of mass m .