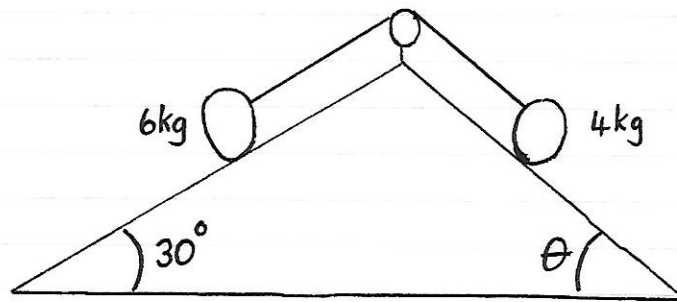


Double Inclined Plane : Equilibrium
In all of the following diagrams, equilibrium exists.

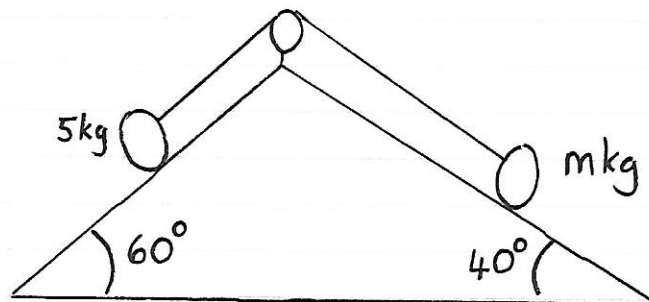
1)



smooth slopes

Calculate θ and the tension.

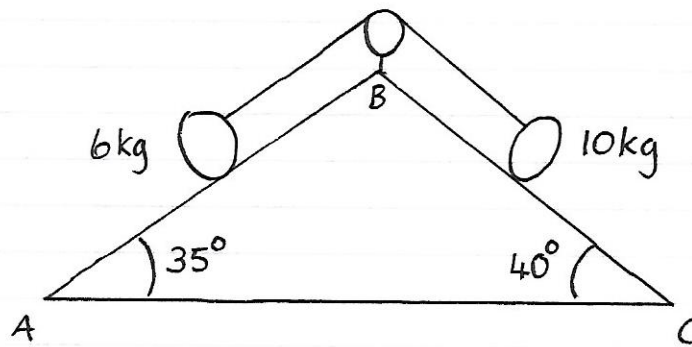
2)



smooth slopes

Calculate m and the tension.

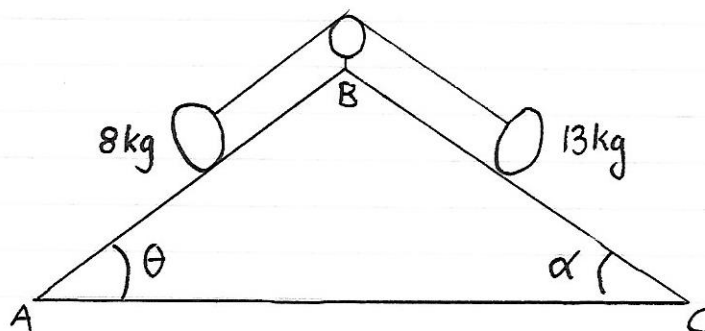
3)



slope BC is smooth
slope AB is rough

Calculate the size of the friction force acting on slope AB

4)



$$\sin \theta = \frac{3}{5} \quad \cos \alpha = \frac{12}{13}$$

slope BC is smooth
slope AB is rough.

Calculate the size of the friction force acting on slope AB .