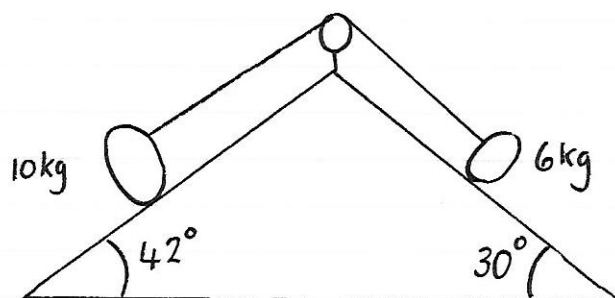# Double Inclined Plane : Acceleration
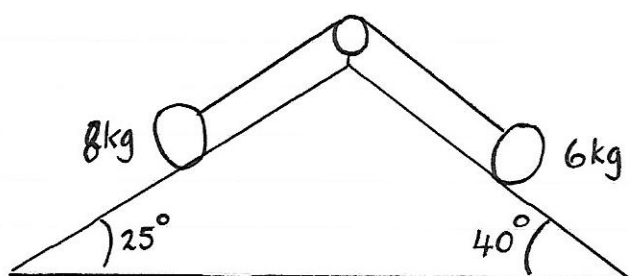
1)

10kg   6kg

42°   30°

slopes are smooth

The masses are held at rest and then released. Calculate the acceleration and indicate the direction of motion.
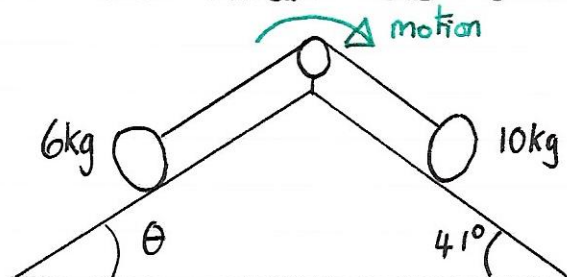
2)

8kg   6kg

25°   40°

slopes are smooth

The masses are held at rest and released. Calculate the acceleration and indicate the direction of motion.

3)

motion

6kg   10kg

θ 41°

slopes are smooth

The masses are held at rest and released. There is an acceleration of $1\ m/s^2$ in the direction as indicated in the diagram. Calculate θ. Calculate the tension in the string.
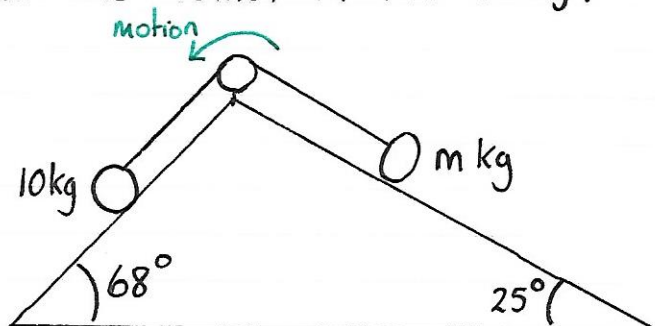
4)

motion

10kg   m kg

68°   25°

slopes are smooth

The masses are held at rest and released. There is an acceleration of $1.5 m/s^2$ in the direction as indicated in the diagram. Calculate m and the tension in the string.