

### **Example – Rough Inclined Plane**

A mass of 6kg rests in limiting equilibrium on a rough plane inclined at  $30^\circ$  to the horizontal.

a) Find the coefficient of friction between the mass and the plane.

b) A horizontal force of magnitude  $P$  N is applied to the box. Given that the box remains in equilibrium, find the maximum possible value of  $P$ .

