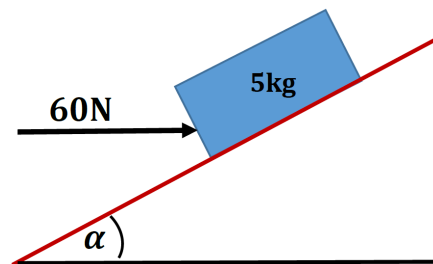


- ① The diagram shows a box of mass 5 kg being pushed up a smooth plane by a horizontal force of magnitude 60 N. The plane is inclined to the horizontal at an angle  $\alpha$ , where  $\tan \alpha = \frac{3}{4}$ .

Find:

- (a) The normal reaction between the box and the plane
- (b) The acceleration of the box up the plane.



This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is a small dark speck near the top right corner.