

Mathematics Questions by Topics

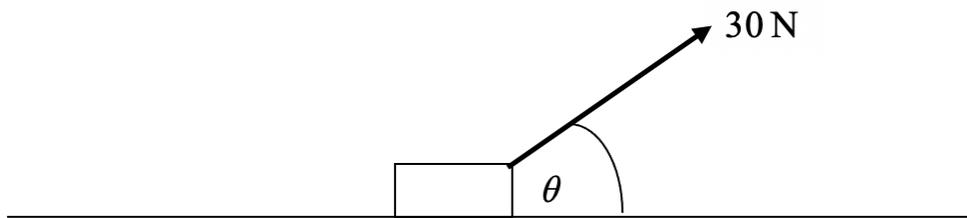
Motion and Force

Question 46

Source: K7SM2Q17

Question 46

A box of mass 10 kg is on a horizontal plane. A rope makes an angle of θ° with the horizontal and exerts a tension of 30 newtons.



If the coefficient of friction between the block and the surface is 0.2, which one of the following values of θ produces the largest acceleration of the block?

- A. $\theta = 0$
- B. $\theta = 5$
- C. $\theta = 10$
- D. $\theta = 15$
- E. $\theta = 20$