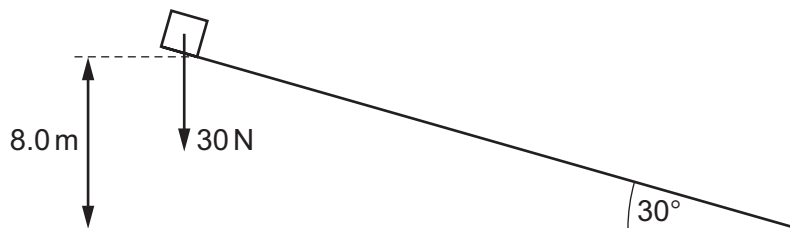


- 17** A box of weight 30 N is released from rest on a ramp that is at an angle of  $30^\circ$  to the horizontal. The box slides down the ramp so that it falls through a vertical distance of 8.0 m. A constant frictional force of 10 N acts on the box while it is moving.



What is the kinetic energy of the box after falling through this distance?

- A** 80 J                      **B** 160 J                      **C** 240 J                      **D** 400 J

**Space for working**