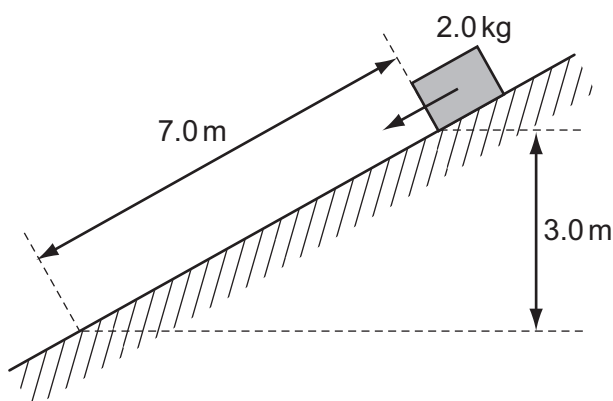


- 15** A block of mass 2.0 kg is released from rest on a slope. It travels 7.0 m down the slope and falls a vertical distance of 3.0 m . The block experiences a frictional force parallel to the slope of 5.0 N .



What is the speed of the block after falling this distance?

- A** 4.9 ms^{-1} **B** 6.6 ms^{-1} **C** 8.6 ms^{-1} **D** 10.1 ms^{-1}
- 16** A man has a mass of 80 kg . He ties himself to one end of a rope which passes over a single fixed pulley. He pulls on the other end of the rope to lift himself up at an average speed of 50 cm s^{-1} .

What is the average useful power at which he is working?

- A** 40 W **B** 0.39 kW **C** 4.0 kW **D** 39 kW

Space for working