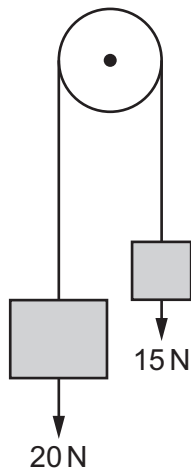


- 16** A pulley of radius 0.40 m supports weights of 20 N and 15 N by means of a thin string, as shown.



The weights are moved by slowly rotating the pulley clockwise through an angle of 60° .

What is the increase in the total gravitational potential energy of the weights?

- A** 0.33 J **B** 2.0 J **C** 2.1 J **D** 15 J

- 17** A mass of 1500 kg is pushed up a hill of height 15 m. The initial speed of the mass is 15 m s⁻¹. The final speed of the mass is 10 m s⁻¹.