

18 On the surface of a planet, 30J of work is done against gravity to raise a mass of 1.0 kg through a height of 10m.

How much work must be done to raise a mass of 4.0 kg through a height of 5.0 m on this planet?

A 15 J

B 60 J

C 120 J

D 200 J

19 The speed of a car increases from 10 m s^{-1} to 15 m s^{-1} and its kinetic energy increases by $\sqrt{5}$.