

H.W [20/11/2021]

1) The ranking will be from greatest to least work done:—

(d) = 4J, (c) = 2J, (a) = 1J, (b) = 0J

2)
$$K.E = \frac{1}{2} mv^2$$

$$1J = \frac{1 \times 1 \times v^2}{2}$$

$$1J = \frac{1v^2}{2}$$

$$1 = \frac{1v^2}{2}$$

$$v = 1m/s^2$$

Ans - (2) $1m/s^2 =$

3) (3) both the mass & velocity are doubled.

4) (1) 8J

5) (2) $\sqrt{2}$ times

6) (4) independent of mass m.

$$\Rightarrow (1) 1.0 \times 10^5 \text{ J}$$

[unclear]

— work done to ...

10 - (1) - 1