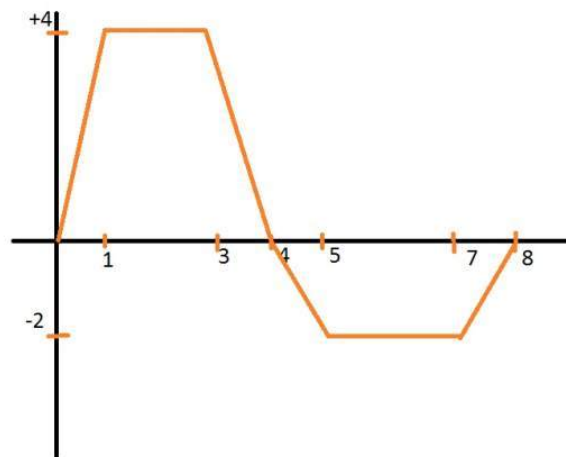


Example: The velocity-time graph of a particle in linear motion is as shown. Both v and t are in SI units. The displacement of the particle is



- a) 6 m
- b) 8 m
- c) 16 m
- d) 18 m

{ Hint : For displacement calculations, between 0 - to 4 , area of the positive trapesium = $\frac{1}{2} \times (2 + 4) \times 4 = 12$

between 4 - to 8, area of negative trapesium = $\frac{1}{2} \times (2 + 4) \times (-2) = -6$.

So , the answer is +6

So , a is the correct option.}