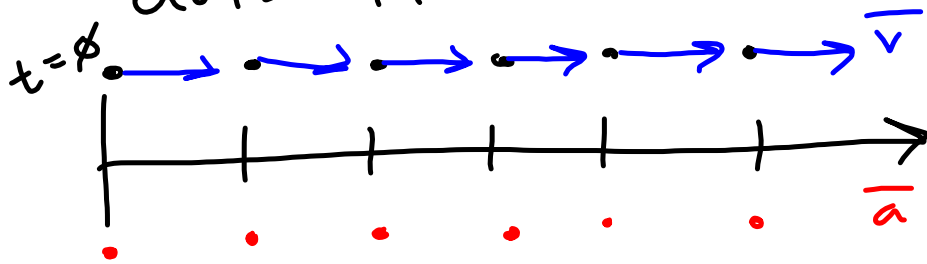
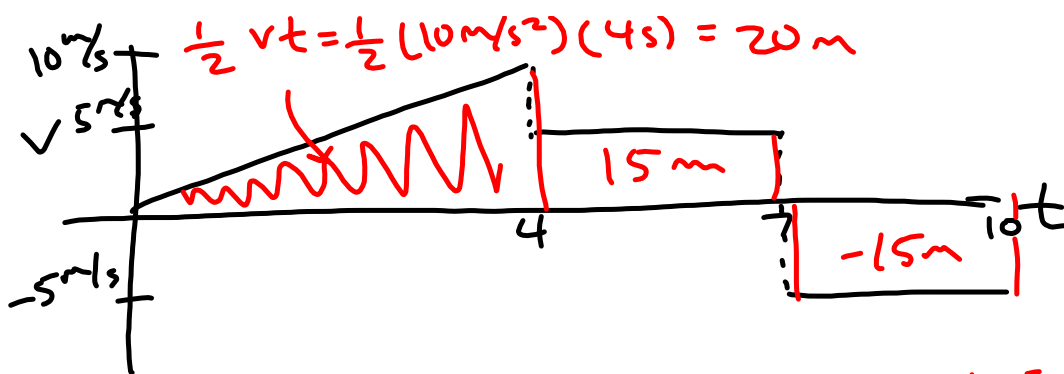


- Motion Maps

— If there is no acceleration, draw dots with no arrows.





- a) Find displacement. $20 \text{ m} + 15 \text{ m} - 15 \text{ m} = 20 \text{ m}$
- b) Find distance. $20 \text{ m} + 15 \text{ m} + 15 \text{ m} = 50 \text{ m}$

A car travels 250 m and comes to rest. If the car was traveling at 25 m/s, what is the acceleration of the car?

$$\begin{aligned}\Delta x &= 250 \text{ m} & v_f^2 &= v_i^2 + 2a\Delta x \\ v_i &= 25 \text{ m/s} & a &= \frac{-v_i^2}{2\Delta x} \\ v_f &= 0 \text{ m/s} & &= -1.25 \text{ m/s}^2 \\ a &= ?\end{aligned}$$

Find the time. $\rightarrow 20 \text{ s.}$