

$$a) \quad \begin{aligned} \Delta v_{0-5} &= 0 \text{ m/s} - 10 \text{ m/s} = -10 \text{ m/s} \\ t_{0-5} &= 5 \text{ sec} \end{aligned}$$

$$a_{0-5} = \frac{\Delta v}{t} = \frac{-10 \text{ m/s}}{5 \text{ sec}}$$

$$a_{0-5} = -2 \text{ m/s}^2$$

$$b) \quad \begin{aligned} \Delta v_{5-10} &= -10 \text{ m/s} - 0 \text{ m/s} = -10 \text{ m/s} \\ t_{5-10} &= 5 \text{ sec} \end{aligned}$$

$$a_{5-10} = \frac{\Delta v}{t} = \frac{-10 \text{ m/s}}{5 \text{ sec}}$$

$$a_{5-10} = -2 \text{ m/s}^2$$