

$$15) \quad \phi_M \rightarrow \phi_M \quad \Delta t = T = \frac{2}{f} = \frac{2}{5} \text{ s}$$

$$v_2' = v_3' = 1 \text{ m/s}$$

$$s_2 = v_2' \cdot \Delta t = \frac{1}{5} \text{ m} = 0.2 \text{ m}$$