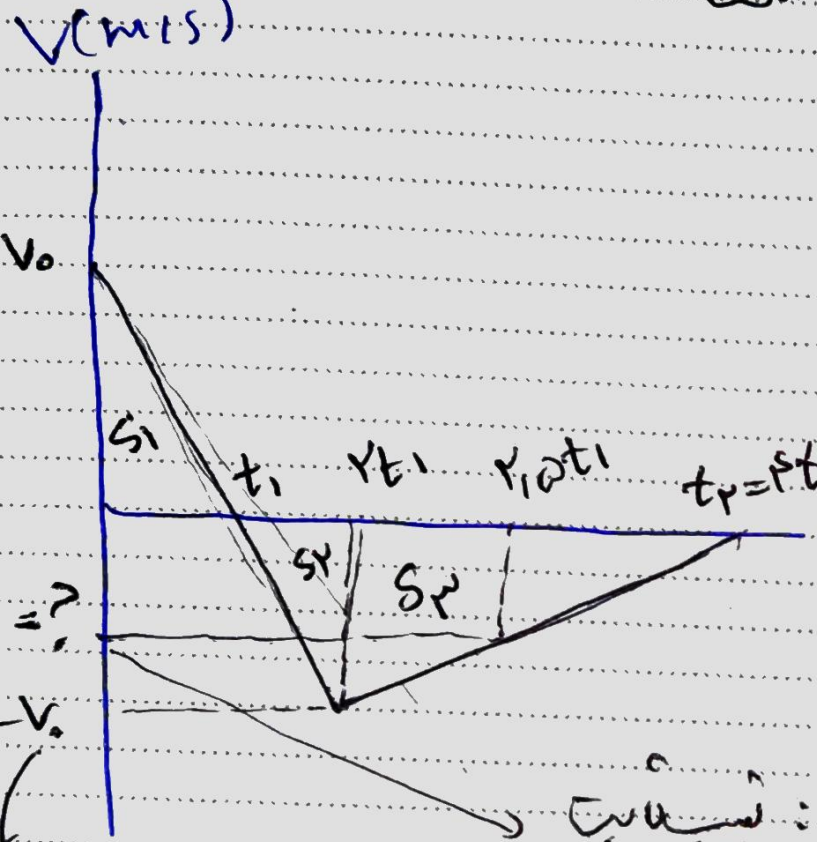
$(0, 2t_1) \longrightarrow$ شتاب = شیب $= -a_1$

$(2t_1, t_2) \longrightarrow$ شتاب = شیب $= a_2$

$\longrightarrow a_1 = 2a_2 \longrightarrow \dfrac{v_0}{t_1} = \dfrac{2v_0}{t_2 - 2t_1} \longrightarrow \boxed{t_2 = 4t_1}$

پس $2/5t_1$ قبل t_2 است.



تشابه: $\dfrac{|?|}{4/5t_1} = \dfrac{|v_0|}{2t_1} \longrightarrow |?| = \frac{3}{4}|v_0|$

$|S_1| = \frac{1}{2}v_0 t_1 \quad |S_2| = \frac{1}{2}v_0 t_1 \quad |S_3| = \frac{1}{2}v_0 \times \frac{3}{4} \times \frac{t_1}{2} = \frac{3}{16}v_0 t_1$

$$\frac{S_{avg}^{(0 \to t_1)}}{S_{avg}^{(t_1, 1.2 t_1)}} = \frac{\frac{|S_1|}{t_1}}{\frac{|S_1| + |S_2|}{1.2\, t_1}} = \frac{1.2\, |S_1|}{|S_1| + |S_2|}$$

$$= \frac{\frac{3}{2} \times \frac{1}{2} V_0 t_1}{\frac{12}{14} V_0 t_1} = \frac{\frac{3}{4}}{\frac{12}{14}} \Rightarrow \frac{21}{42} = \frac{1}{2}$$