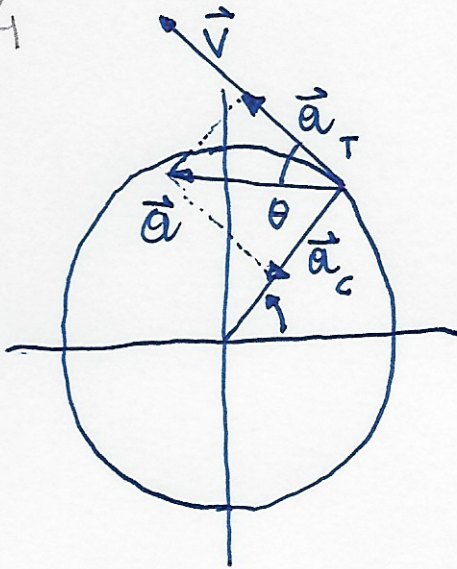


4



$$\theta = 60^\circ$$

$$\alpha = k t, \text{ INTEGRANDO } \omega = \frac{k t^2}{2} + \omega_0$$

→ MA  $\omega_0 = 0$  PERCHÉ IL TESTO DICE

"INIZIA A RUOTARE", CIOÈ  $\omega(0) = 0$

→ DALLA FIGURA  $\tan \theta = \frac{a_c}{a_t}$

QUINDI  $\tan(60^\circ) = \sqrt{3} = \frac{a_c}{a_t} = \frac{\omega^2 R}{\alpha R} = \frac{k^2 t^4}{4 k t}$

CIOÈ  $t = \sqrt[3]{\frac{4\sqrt{3}}{k}} \approx 7 \text{ s}$