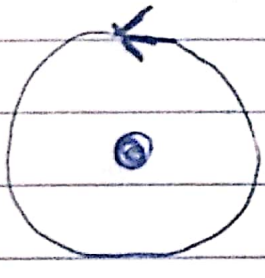


Date

20-P-KM-BK-025



Given: r , T (period), A (acc.)

$$\dot{\theta} = 2\pi / T \cdot 60 \text{ rad/sec}$$

case 1: ~~$\ddot{r} = A$~~ $\ddot{\theta} = A/r$



$$a = -r\dot{\theta}^2 u_r + r\ddot{\theta} u_\theta$$

$$\|a\| = \sqrt{(r\dot{\theta}^2)^2 + (A)^2}$$

case 2: $\ddot{r} = A$ $a = (\ddot{r} - r\dot{\theta}^2) u_r$

$$\|a\| = \|\ddot{r} - r\dot{\theta}^2\|$$