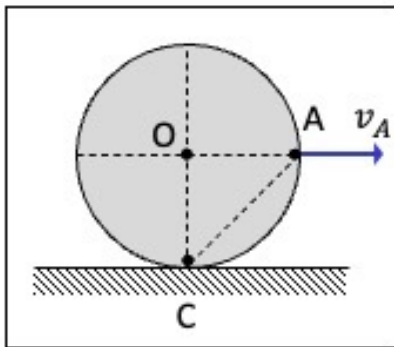
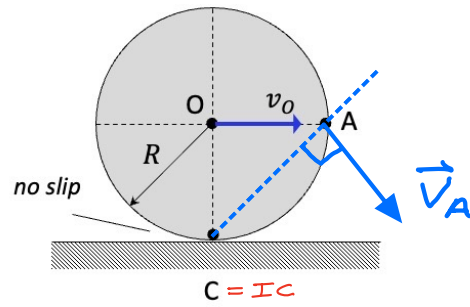
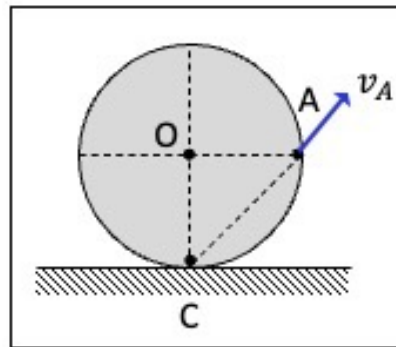


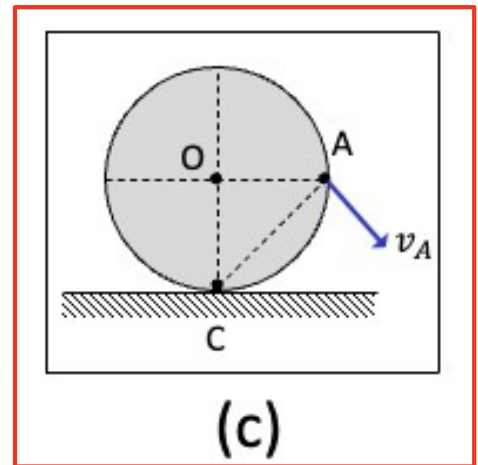
Problem Q1 - velocity



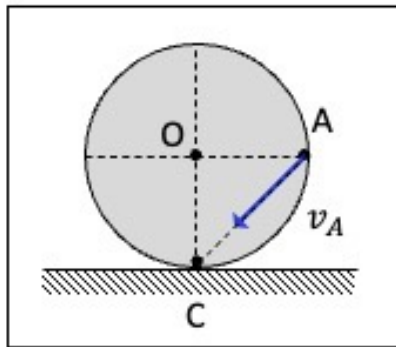
(a)



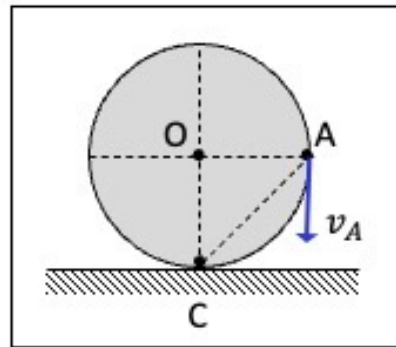
(b)



(c)



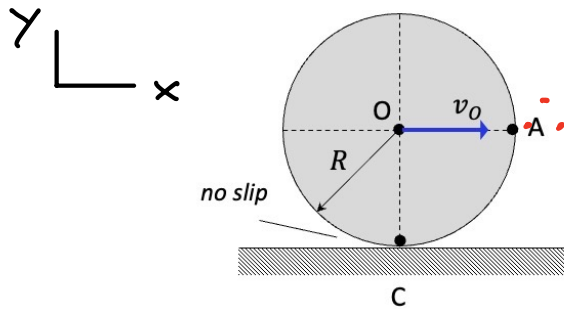
(d)



(e)

Problem Q2 - acceleration

$v_0 = \text{constant} \Rightarrow$
 $\begin{cases} a_0 = 0 \\ \omega = \text{constant} \Rightarrow \alpha = 0 \end{cases}$



$\vec{a}_A = \vec{a}_O + \vec{\alpha} \times \vec{r}_{A/O} - \omega^2 \vec{r}_{A/O}$
 $= -\omega^2 R \hat{u}$

