

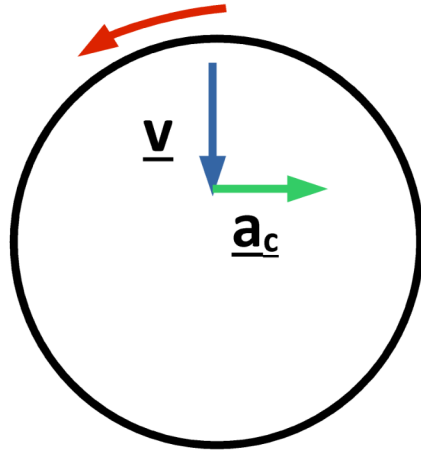
Coriolis Examples

$$\underline{a}_c = 2\underline{\Omega} \times \underline{v} \text{ for 2D Planar Motion}$$

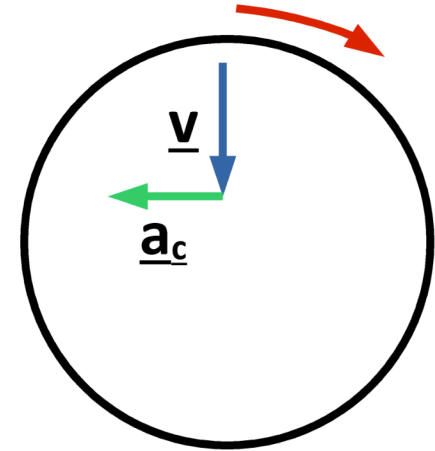
$\underline{\Omega}$ = Angular velocity of the reference frame.

\underline{v} = object's velocity with respect to the reference frame.

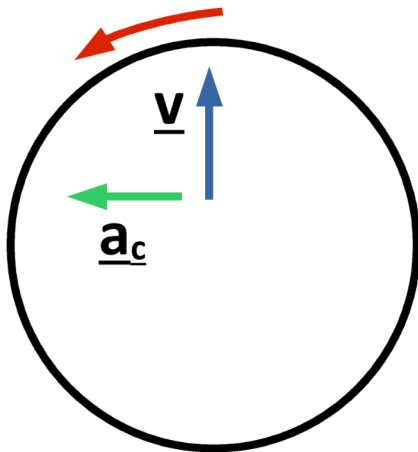
$$\begin{aligned}\underline{\Omega} &= +\underline{k} \\ \underline{v} &= -\underline{y} \\ \underline{a}_c &= 2\underline{\Omega} \times \underline{v} \\ &= +\underline{x}\end{aligned}$$



$$\begin{aligned}\underline{\Omega} &= -\underline{k} \\ \underline{v} &= -\underline{y} \\ \underline{a}_c &= 2\underline{\Omega} \times \underline{v} \\ &= -\underline{x}\end{aligned}$$



$$\begin{aligned}\underline{\Omega} &= +\underline{k} \\ \underline{v} &= +\underline{y} \\ \underline{a}_c &= 2\underline{\Omega} \times \underline{v} \\ &= -\underline{x}\end{aligned}$$



$$\begin{aligned}\underline{\Omega} &= -\underline{k} \\ \underline{v} &= +\underline{y} \\ \underline{a}_c &= 2\underline{\Omega} \times \underline{v} \\ &= +\underline{x}\end{aligned}$$

