Calculate the Coriolis acceleration of an aeroplane flying along the equator due east at a speed of 300m/s−1. Please explain

Angular speed of the Earth:

$$\omega = 2\pi f = \frac{6.28}{24 * 3600s} = 7.27 * 10^{-5} s^{-1}$$

Coriolis acceleration:

$$a_C = 2[\omega \times v] = 2\omega v$$

$$a_C = 2 * 7.27 * 10^{-5} s^{-1} * 300 m/s = 0.044 m/s^2$$

Answer: $a_C = 0.044 m/s^2$