

Q1. Find the fourier Coefficients for  $x(t) = B + A \sin(\Omega_0 t + \theta)$  and hence write the fourier series representation in terms of exponentials.

Q2.  $x(t) = \cos\left(\Omega_0 t + \frac{\pi}{4}\right)$ . Find the fourier series representation by finding the fourier series coefficients. First, write down the value of fundamental frequency  $\Omega_0$ .