## Problem 3.6

(a)The Fundamental Frequency, $\omega_0 = gcd(3.6\pi, 8.4\pi) = 1.2\pi$ rad/s

(b) The fundamental period $T_0 = 1/f_0 = 1/0.6 = 5/3$ s

(c) DC value of this signal $= -7$

(d) Fourier coefficients and their values :

| k | $a_k$ |
|---|---|
| -7 | $3e^{-j\pi/4}$ |
| -3 | $4e^{j\pi/3}$ |
| 0 | $7e^{j\pi}$ |
| 3 | $4e^{-j\pi/3}$ |
| 7 | $3e^{j\pi/4}$ |