A continuous-time signal $x(t)$ is real valued and has a fundamental period $T_0 = 8$. Only a few values of $X[k]$ are non-zero; these are

$$X[1] = X[-1] = 2$$

$$X[3] = X^*[-3] = 4j$$

(← complex conjugate)

Express $x(t)$ in the form

$$x(t) = \sum_{k=0}^{\infty} A_k \cos(\omega_k t + \phi_k)$$