P1 Find the DTFT of $x[n] = 6e^{-2n}u[n-1]$ using tables and properties of the DTFT.

P2 Find the IDTFT of $X(e^{j\omega}) = 1 + 2\cos(\omega)$.
Hint: use Euler's identities to make it a complex exponential).

P3 Without computing the IDTFT, determine if x[n] is an even or odd sequence if

$$X(e^{j\omega}) = \begin{cases} |\omega|, & 0 \le |\omega| \le \omega_c \\ 0, & \omega_c \le |\omega| \le \pi \end{cases}$$