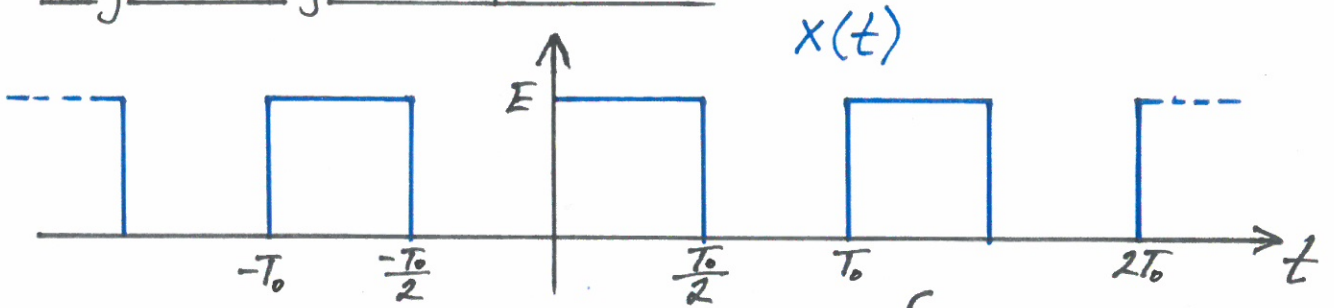
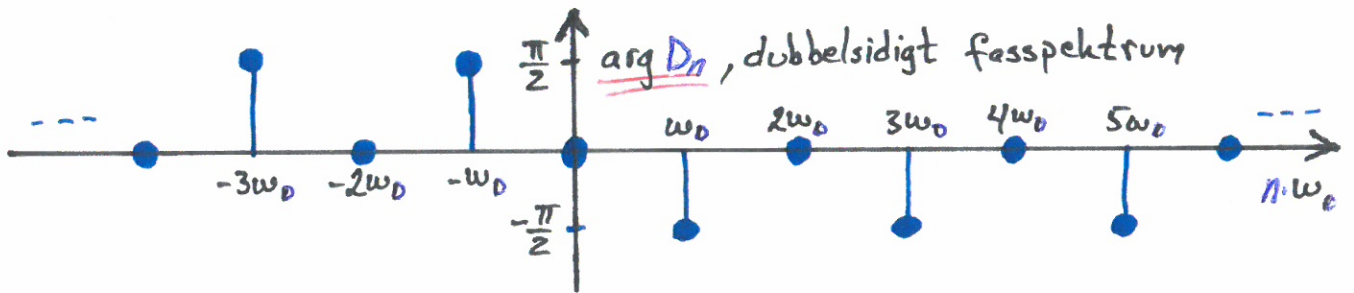
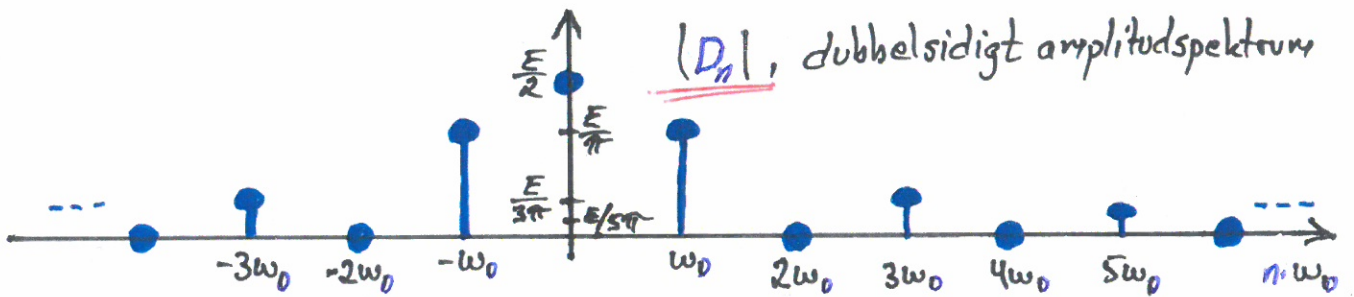


Fyrkantvågens spektrum



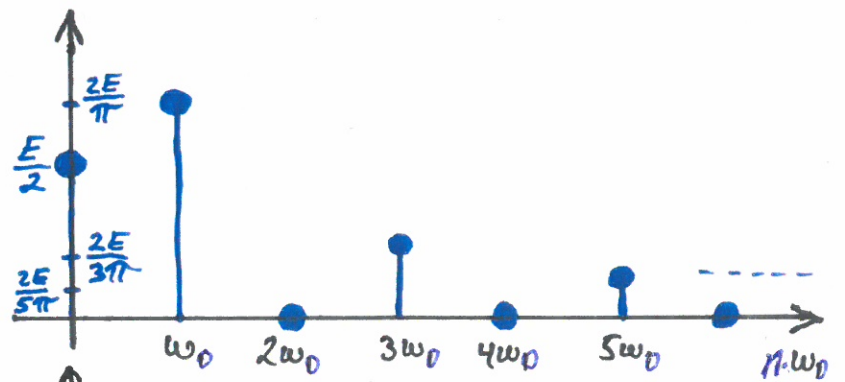
Tavlan: $D_n = \frac{1}{T_0} \int_{-T_0/2}^{T_0/2} x(t) e^{-jn\omega_0 t} dt = \dots = \begin{cases} \frac{E}{2} & n=0 \\ 0 & \text{jämna } n \neq 0 \\ \frac{E}{jn\pi} & \text{udda } n \end{cases}$

$\Rightarrow \begin{cases} C_0 = \frac{E}{2} \\ C_n = \frac{2E}{n \cdot \pi} ; \text{ udda } n \\ \theta_n = -\frac{\pi}{2} ; \text{ udda } n \end{cases} \quad \begin{cases} C_n = 0 ; \text{ jämna } n > 0 \\ \theta_n = 0 ; \text{ jämna } n \end{cases}$



Enkelsidigt amplitudspektrum

C_n



Enkelsidigt fasspektrum

θ_n

