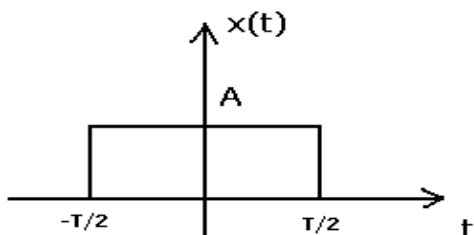


## Exemplos SSI- Aula 1 – Sinal de energia e Sinal de potência

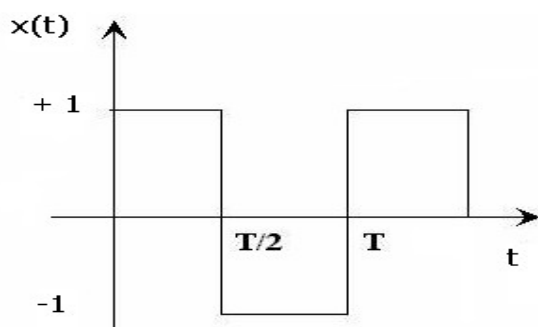
1. Qual a energia total do pulso retangular da figura abaixo?



$$E_x(t) = \int_{-\infty}^{\infty} x^2(t) dt$$

$$x(t) = A \quad -T/2 < t < T/2$$

2. Qual a potência média da onda quadrada descrita abaixo?



$$P_x(t) = \frac{1}{T} \int_{-T/2}^{T/2} x^2(t) dt$$

$$x(t) = \begin{cases} 1 & \text{if } 0 < t < T/2 \\ -1 & \text{if } T/2 < t < T \end{cases}$$