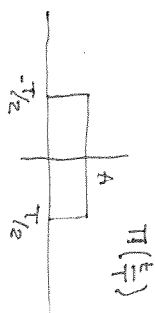


Special Functions

Rectangular pulse signal



$$\pi\left(\frac{t}{T}\right)$$

$$w(\beta) = AT \operatorname{sinc}(\beta T) = AT \operatorname{sac}(\pi \beta T)$$



Unit impulse signal



$$\delta(t)$$

$$w(\beta) = 1$$

Unit step signal



$$u(t)$$

$$w(\beta) = \frac{1}{2} \delta(\beta) + \frac{1}{j2\pi\beta}$$

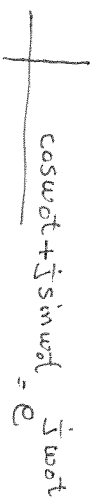
Signum signal



$$\operatorname{sgn}(t)$$

$$w(\beta) = \frac{1}{j\pi\beta}$$

Exponential signal



$$w(\beta) = \delta(\beta - \beta_0)$$