



$$\mathcal{L}\{u(t - t_0)\} = \int_0^{\infty} e^{-st} u(t - t_0) dt = \frac{e^{-st_0}}{s}$$

$$u(t - t_0) \Leftrightarrow \frac{e^{-st_0}}{s}$$

$$u(t) \Leftrightarrow \frac{1}{s}$$