



$$u(t) = 2 \rightarrow U(s) = \frac{2}{s}$$

$$G(s) = \frac{1}{s}$$

$$y(t) = ?$$

$$G(s) = \frac{Y(s)}{U(s)} \rightarrow Y(s) = G(s) \cdot U(s)$$

$$Y(s) = G(s) \cdot U(s) = \frac{1}{s} \cdot \frac{2}{s} = \frac{2}{s^2}$$

$$Y(s) = \frac{2}{s^2}$$

$$\mathcal{L}\{t^n\} = \frac{n!}{s^{n+1}}$$

$$y(t) = \mathcal{L}^{-1}\{Y(s)\}$$

$$y(t) = 2 \cdot t$$