

Typo for 3TR4 Courseware

a) p8: Eq. 2.3: delete '= 0'

b) p20: Eq. 2.48: $(-jt)^n s(t) \leftrightarrow \frac{d^n S(\omega)}{d\omega^n}$

c) p26:

3) $\text{sgn}(t)$

The sign function is defined as

$$\text{sgn}(t) = \begin{cases} 1 & t > 0 \\ 0 & t = 0 \\ -1 & t < 0 \end{cases}$$

Thus we can write $\text{sgn}(t) = 2u(t) - 1$, when

$$u(t) = \begin{cases} 1 & t > 0 \\ \frac{1}{2} & t = 0 \\ 0 & t < 0 \end{cases}$$

d) p56, line 3: $x_2(t) = x'_2(t) + K_2$

e) p61: 5.

$$v_i(t) = \begin{cases} e^{-\alpha t} & t \geq 0 \\ 0 & t < 0 \end{cases}$$