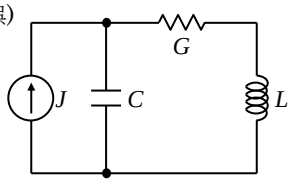
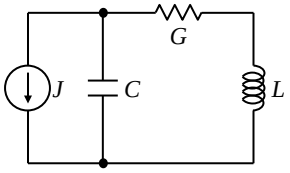
正誤表

1. p.92～p.110 のヘッダー　誤) 6. 交 流 回 路 → 正) 6. 二 端 子 対 回 路

2. p.74 図 5.6(d)において、電流源の向きが逆　誤)



正)



3. p.100 式(6.44)

誤) $V'_2 = V''_1,\ \ I'_2 + I''_1$

正) $V'_2 = V''_1,\ \ I'_2 = I''_1$

4. p102 式(6.53)

誤) $$[F_\pi] = \begin{bmatrix} 1 & 0 \\ \dfrac{1}{Z_{31}} & 1 \end{bmatrix} \begin{bmatrix} 1 & Z_{12} \\ 0 & 1 \end{bmatrix} \begin{bmatrix} 1 & 0 \\ \dfrac{1}{Z_{23}} & 1 \end{bmatrix} = \begin{bmatrix} 1+\dfrac{Z_{12}}{Z_{23}} & Z_{12} \\ \dfrac{1}{Z_{31}} + \dfrac{Z_{12}}{Z_{23}Z_{31}} & 1+\dfrac{Z_{12}}{Z_{31}} \end{bmatrix} \quad (6.53)$$

正) $$[F_\pi] = \begin{bmatrix} 1 & 0 \\ \dfrac{1}{Z_{31}} & 1 \end{bmatrix} \begin{bmatrix} 1 & Z_{12} \\ 0 & 1 \end{bmatrix} \begin{bmatrix} 1 & 0 \\ \dfrac{1}{Z_{23}} & 1 \end{bmatrix} = \begin{bmatrix} 1+\dfrac{Z_{12}}{Z_{23}} & Z_{12} \\ \dfrac{1}{Z_{31}} + \dfrac{Z_{12}}{Z_{23}Z_{31}} + \dfrac{1}{Z_{23}} & 1+\dfrac{Z_{12}}{Z_{31}} \end{bmatrix} \quad (6.53)$$

5. p.140 式(7.90)

誤) $$\begin{aligned} V_x &= V_l \cos\beta(l-x) - jZ_0 I_l \sin\beta(l-x) \\ I_x &= -j\frac{V_l}{Z_0}\sin\beta(l-x) + I_l\cos\beta(l-x) \end{aligned} \quad (7.90)$$

正) $$\begin{aligned} V_x &= V_l \cos\beta(l-x) + jZ_0 I_l \sin\beta(l-x) \\ I_x &= j\frac{V_l}{Z_0}\sin\beta(l-x) + I_l\cos\beta(l-x) \end{aligned} \quad (7.90)$$

6. p145 式(7.106)

誤) $$Z_x = \frac{V_x}{I_x} = Z_0 \frac{Z - jZ_0\tan\beta(l-x)}{-jZ\tan\beta(l-x) + Z_0} \quad (7.106)$$

正) $$Z_x = \frac{V_x}{I_x} = Z_0 \frac{Z + jZ_0\tan\beta(l-x)}{jZ\tan\beta(l-x) + Z_0} \quad (7.106)$$

7. p145 式(7.107)

誤) $$\frac{V_{\max}}{I_{\min}} = \frac{Z_0 I_{\max}}{I_{\min}} = Z_0 \mathrm{SWR} = Z_0 \frac{Z - jZ_0\tan\beta(l-x_{\max})}{-jZ\tan\beta(l-x_{\max}) + Z_0} \quad (7.107)$$

正) $$\frac{V_{\max}}{I_{\min}} = \frac{Z_0 I_{\max}}{I_{\min}} = Z_0 \mathrm{SWR} = Z_0 \frac{Z + jZ_0\tan\beta(l-x_{\max})}{jZ\tan\beta(l-x_{\max}) + Z_0} \quad (7.107)$$

8. p146 式(7.108)

誤) $$Z = Z_0 \frac{\mathrm{SWR} + j\tan\beta(l-x_{\max})}{1 + j\,\mathrm{SWR}\tan\beta(l-x_{\max})} \quad (7.108)$$

正) $$Z = Z_0 \frac{\mathrm{SWR} - j\tan\beta(l-x_{\max})}{1 - j\,\mathrm{SWR}\tan\beta(l-x_{\max})} \quad (7.108)$$

9. p146 式(7.109)

誤) $$Z = Z_0 \frac{1 + j\,\mathrm{SWR}\tan\beta(l-x_{\min})}{\mathrm{SWR} + j\tan\beta(l-x_{\min})} \quad (7.109)$$

正) $$Z = Z_0 \frac{1 - j\,\mathrm{SWR}\tan\beta(l-x_{\min})}{\mathrm{SWR} - j\tan\beta(l-x_{\min})} \quad (7.109)$$

10. p151 式(A.23)

誤) $$\begin{bmatrix} E_p \\ I_1 \end{bmatrix} = \begin{bmatrix} A & B \\ C & D \end{bmatrix} \begin{bmatrix} 0 \\ -I_q \end{bmatrix} \quad (A.23)$$

正) $$\begin{bmatrix} E_p \\ I_1 \end{bmatrix} = \begin{bmatrix} A & B \\ C & D \end{bmatrix} \begin{bmatrix} 0 \\ I_q \end{bmatrix} \quad (A.23)$$

11. p160 式(A.88)

誤) $$Z_L = \frac{300^2}{200 + j150} = 288 + j216[\Omega] \quad (A.88)$$

正) $$Z_L = \frac{300^2}{200 + j150} = 288 - j216[\Omega] \quad (A.88)$$