$$\underline{Z} = R_R + jX_R = \frac{1}{\underline{Y}} = \frac{1}{G_P - jB_P}$$ mit $G_P + jB_P$ erweitern

$$R_R + jX_R = \frac{G_P + jB_P}{G_P{}^2 + B_P{}^2} = \frac{G_P}{G_P{}^2 + B_P{}^2} + j\frac{B_P}{G_P{}^2 + B_P{}^2}$$

$$R_R = \frac{G_P}{Y^2}$$

$$X_R = \frac{B_P}{Y^2}$$

$j^0 = +1$
$j^1 = j$
$j^2 = -1$
$j^3 = -j$
$j^4 = +1$
$\frac{1}{j} = j^{-1} = -j$
$-j \cdot j = 1$

$$\underline{Y} = G_P - jB_P = \frac{1}{\underline{Z}} = \frac{1}{R_R + jX_R}$$ mit $R_R - jX_R$ erweitern

$$G_P - jB_P = \frac{R_R - jX_R}{R_R{}^2 + X_R{}^2} = \frac{R_R}{Z^2} - j\frac{X_R}{Z^2}$$

$$G_P = \frac{R_R}{Z^2}$$

$$B_P = \frac{X_R}{Z^2}$$

$j^0 = +1$
$j^1 = j$
$j^2 = -1$
$j^3 = -j$
$j^4 = +1$
$\frac{1}{j} = j^{-1} = -j$
$-j \cdot j = 1$