$$\begin{split} y_1(s) &= \frac{G_1(s)G_2(\ s)}{1 + G_1(\ s)G_2(\ s)H_1(\ s)H_2(\ s)} y^*(\ s) + \frac{G_2(\ s)}{1 + G_1(s)G_2(s)H_1(s)H_2(s)} P(s) \\ &- \frac{G_1(\ s)G_2(s)H_2(s)}{1 + G_1(s)G_2(s)H_1(s)H_2(s)} N(s) \end{split}$$