



$$\frac{Y(s)}{R(s)} = \frac{\frac{G_1 G_3}{1 - G_2 G_3}}{1 + \frac{G_1 G_3}{1 - G_2 G_3} \cdot \frac{(1 + G_3 H_1)}{G_3}} = \frac{G_1 G_3}{1 - G_2 G_3 + G_1 + G_1 G_3 H_1}$$