



$$v_{out} = - \left( \frac{R_3}{R_1} v_1 + \frac{R_3}{R_2} v_2 + \frac{R_3}{R_3} v_3 \right)$$
$$Z_{in}(v_1) = R_1 + R_2 || R_3$$
$$Z_{out} = 0$$