1 of 2. (a) What is the expression for the voltage gain $V_o/V_i$ at very low frequencies?
(b) What is the expression for the voltage gain $V_o/V_i$ at very high frequencies?
(c) What is the expression for the pole frequency in rad/s for the transfer function for $V_o/V_i$?
(d) What is the expression for the zero frequency in rad/s for the transfer function for $V_o/V_i$?
(e) Sketch and label the straight line Bode magnitude plot for $|V_o/V_i|$.

\[ A_{\text{low}} = -\frac{R_F}{R_2} \quad A_{\text{high}} = -\frac{R_F}{R_1||R_2} \]
\[ \omega_{\text{pole}} = \frac{1}{(R_1 + R_2) C} \quad \omega_{\text{zero}} = \frac{1}{R_1 C} \]

High-pass shelving.

2 of 2. (a) What is the expression for the voltage gain $V_o/V_i$ at very low frequencies?
(b) What is the expression for the voltage gain $V_o/V_i$ at very high frequencies?
(c) What is the expression for the pole frequency in rad/s for the transfer function for $V_o/V_i$?
(d) What is the expression for the zero frequency in rad/s for the transfer function for $V_o/V_i$?
(e) Sketch and label the straight line Bode magnitude plot for $|V_o/V_i|$.

\[ A_{\text{low}} = 1 + \frac{R_F}{R_1 + R_2} \quad A_{\text{high}} = 1 + \frac{R_F}{R_1} \]
\[ \omega_{\text{zero}} = \frac{1}{(R_1 + R_F)||R_2C} \quad \omega_{\text{pole}} = \frac{1}{R_1||R_2C} \]

High-pass shelving.