The input to this circuit shown is the voltage, $v_i(t)$, of the independent voltage source. The output is the voltage, $v_o(t)$, across the 10 kΩ resistor.

Six Bode plots, identified by the letters A through F, are shown on the next page.

1. Is it possible to design this circuit to have this Bode plot A? _____no______(yes or no)

2. Is it possible to design this circuit to have this Bode plot B? ______yes______(yes or no)
   If yes, specify the required values of $R_1$, $R_2$ and $C_1$:
   
   $R_1 = ______10_________ kΩ$, $R_2 = ______200_________ kΩ$, $C_1 = _______4________nF$

3. Is it possible to design this circuit to have this Bode plot E? ______yes_____(yes or no)
   If yes, specify the required values of $R_1$, $R_2$ and $C_1$:
   
   $R_1 = ______10_________ kΩ$, $R_2 = _______20_________ kΩ$, $C_1 = _______40________nF$

4. Is it possible to design this circuit to implement Bode plot F? _____no_______(yes or no)
Gain Bode Plots

A

B

C

D

E

F