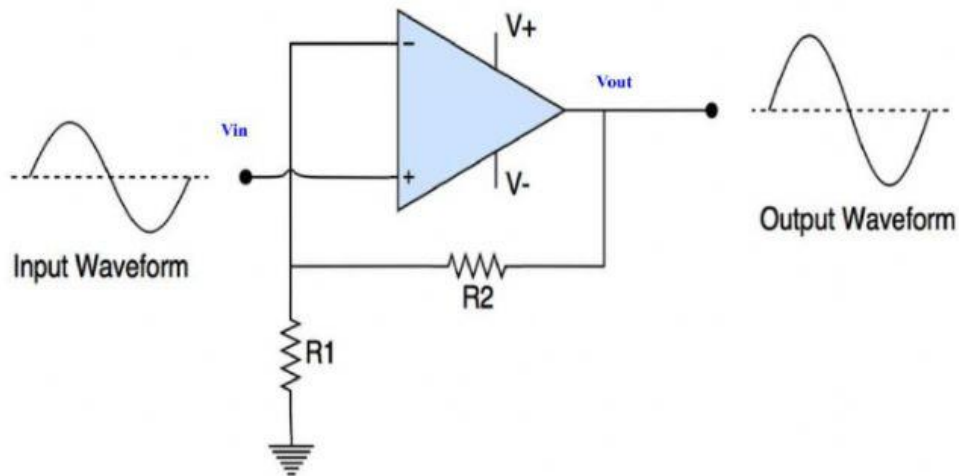


PC5.3 Non-Inverting Amplifier

For the non-inverting amplifier shown below, answer questions a to d.



- a) What is the output expression?
- a. $V_{out} = V_{in}$
 - b. $V_{out} = V_{in}(R_2/R_1)$
 - c. $V_{out} = V_{in}(1+R_2/R_1)$
 - d. $V_{out} = V_{in}(1+R_1/R_2)$
- b) If $R_1 = 1\text{K}\Omega$, $R_2 = 10\text{K}\Omega$, $V_{in} = 2\text{V}$. Calculate the voltage Gain A?
- c) If $R_1 = 1\text{K}\Omega$, $R_2 = 10\text{K}\Omega$, $V_{in} = 2\text{V}$. Calculate V_{out} ?
- d) Is the output of this amplifier inverted?