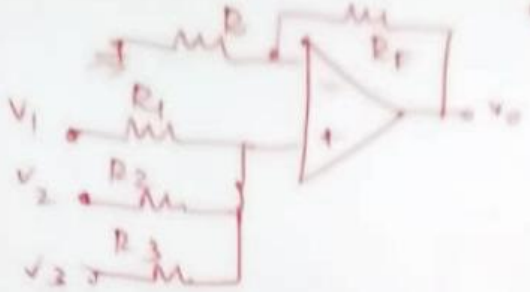
25. Consider the non-inverting summing amplifier



a) Find the gain of the amplifier

b) Repeat for inverting summing amplifier

26. Explain the working principle of half wave rectifier using op-amp.

27. a) Design ideal and practical differentiator using op-amp & ~~draw~~ draw its frequency response.

b)

28 a) Design ideal and practical integrator using op-amp and draw its frequency response

b) Consider practical integrator, $R_1 = 10k\Omega$, $R_F = 100k\Omega$, $C_F = 10nF$, determine the lower frequency limit of integration & find the output if the input is 1V peak sinewave at 5kHz.

29. Repeat Problem 25, if $V_1 = V_2 = V_3 = 5V$, $R_1 = R_2 = R_3 = R = 1K$, $R_F = 10K$

Find V_o. Consider non-inverting amplifier.