

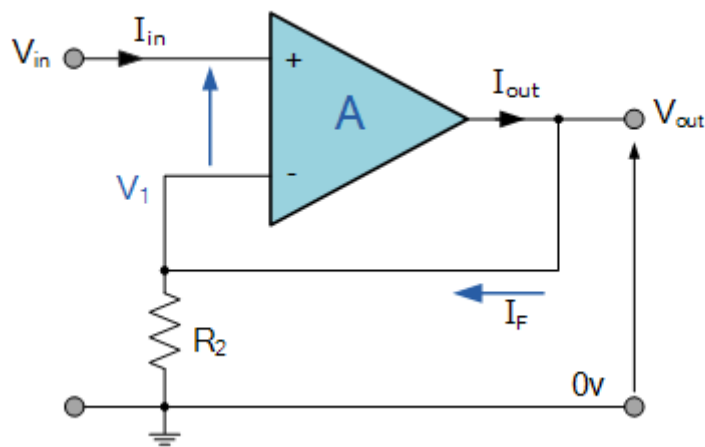
Answer to Question #69491, Physics / Electric Circuits

Question:

6. a) Draw a circuit of a non-inverting amplifier with gain 1 using op-amp. Draw the output voltage curve of this circuit for a step input of 5V amplitude and 50 kHz frequency, if the slew rate of the op-amp is $0.5 \text{ V}/\mu\text{s}$. (Use proper scale on the time axis to illustrate the effect of slew rate).

Solution:

I assume that in the task the voltage gain is meant so the circuit will look like this



Then the graph of output voltage will look like this

