

CENG 215 Circuits and Electronics

LAB #10 Feuille

Place: PC Lab

Aim

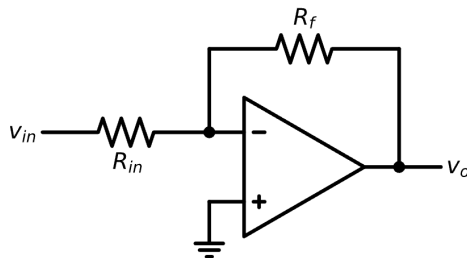
To build and analyze OPAMP circuits.

Materials/Devices:

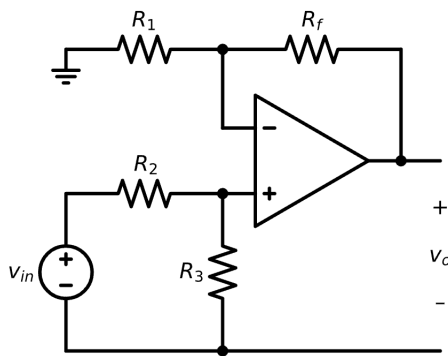
PySpice

Work to be done:

- A. Implement the following Inverting Opamp Circuit in PySpice. Let V_{in} be $0.1\sin wt$ and choose the resistors to have a gain of -100. The OPAMP is 741 and it should be supplied by symmetrical +15v and -15v voltage sources.



- B. Repeat the above mission for the following non-inverting Opamp. The gain should be 100.



To implement OPAMP 741, save uA741.lib file in an appropriate place and then use the following or a similar code:

```
circuit.include("/Users/ayav/repos/PySpice/examples/uA741.lib")
circuit.V(1, 'Vcc', circuit.gnd, 15@u_V)
circuit.V(2, 'Vss', circuit.gnd, -15@u_V)
circuit.X(1, 'uA741', 'v+', 'v-', 'Vcc', 'Vss', 'out')
```

Final Remarks

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