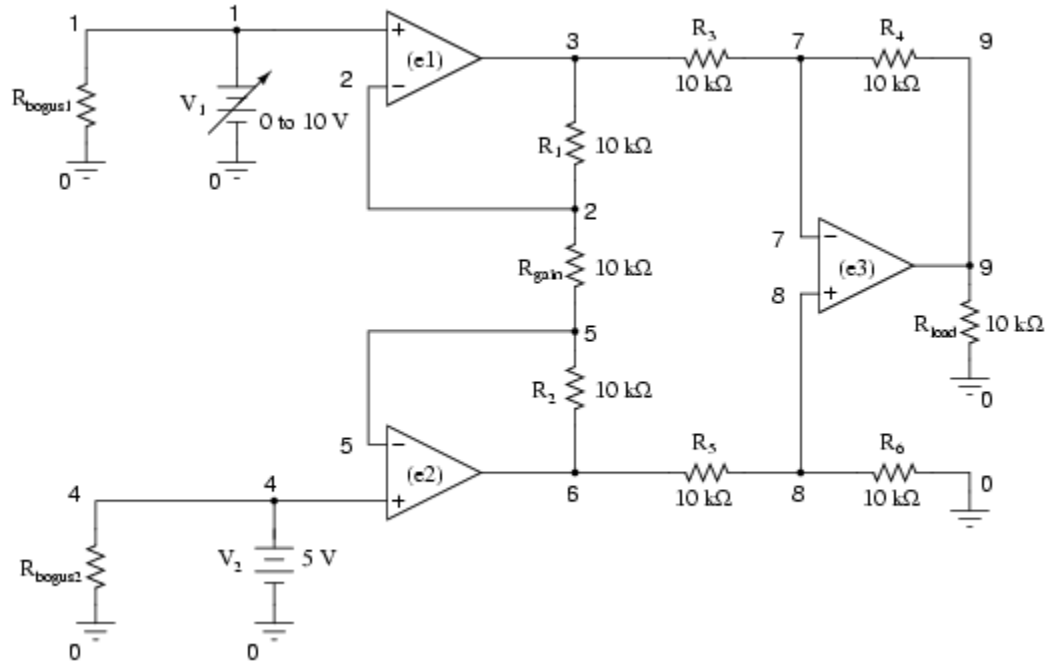


Instrumentation amplifier



Note the very high-resistance R_{bogus1} and R_{bogus2} resistors in the netlist (not shown in schematic for brevity) across each input voltage source, to keep SPICE from thinking V_1 and V_2 were open-circuited, just like the other op-amp circuit examples.

Netlist:

Instrumentation amplifier

```
v1 1 0
rbogus1 1 0 9e12
v2 4 0 dc 5
rbogus2 4 0 9e12
e1 3 0 1 2 999k
e2 6 0 4 5 999k
e3 9 0 8 7 999k
rload 9 0 10k
r1 2 3 10k
rgain 2 5 10k
r2 5 6 10k
r3 3 7 10k
r4 7 9 10k
r5 6 8 10k
r6 8 0 10k
.dc v1 0 10 1
.print dc v(9) v(3,6)
```

