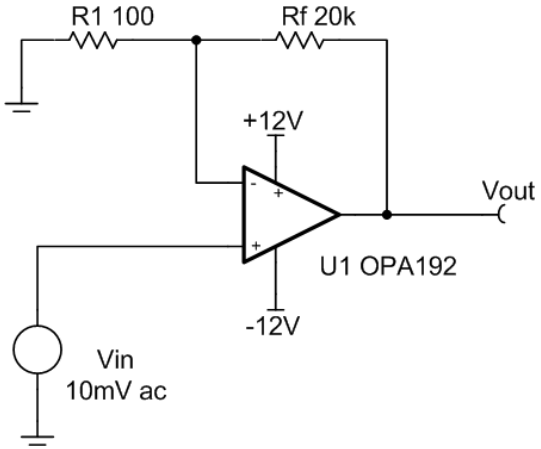
Noise 5

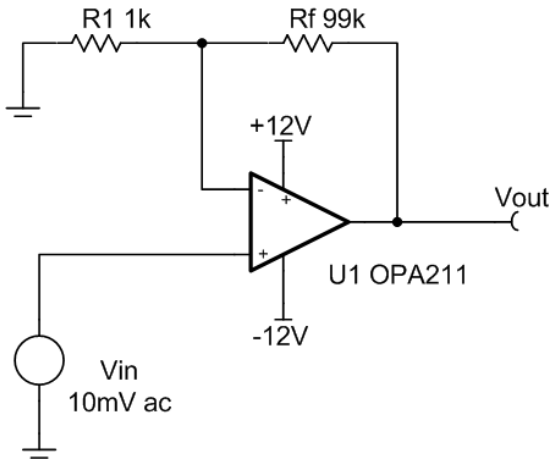
Exercises

TI Precision Labs – Op Amps

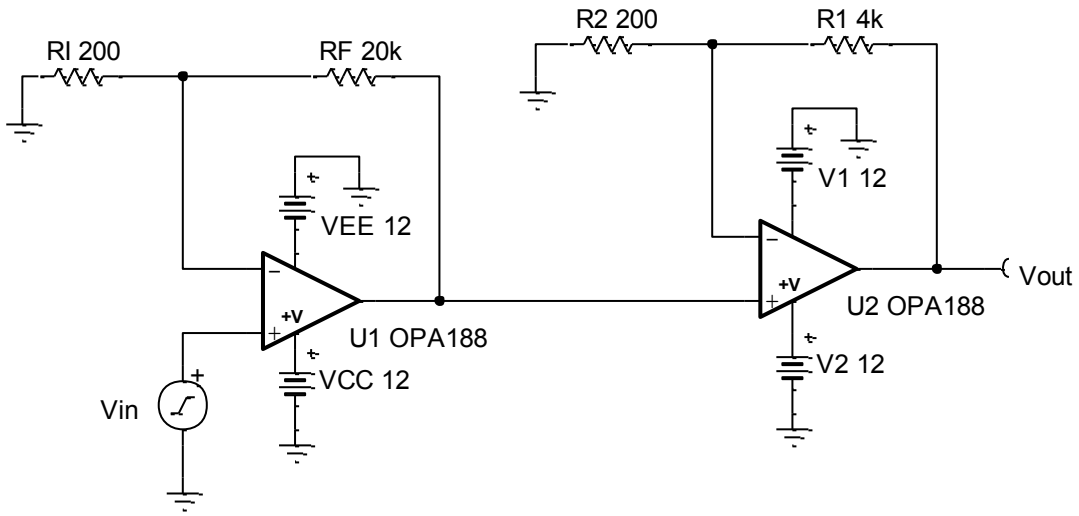
1. **Use simulation to determine the noise spectral density and total rms noise for the circuit below. This circuit was solved by hand in the problems from noise 4. Compare the simulated results to the hand calculation results.**



2. **Use simulation to determine the noise spectral density and total rms noise for the circuit below. This circuit was solved by hand in the problems from noise 4. Compare the simulated results to the hand calculation results.**



3. **Use simulation to determine the noise spectral density and total rms noise for the circuit below. This circuit was solved by hand in the problems from noise 4. Compare the simulated results to the hand calculation results.**



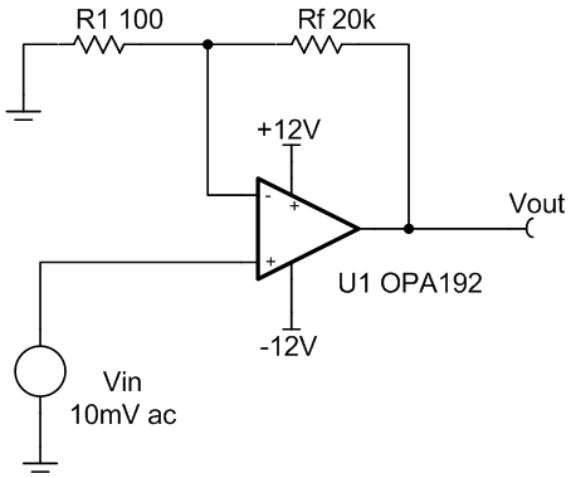
Noise 5

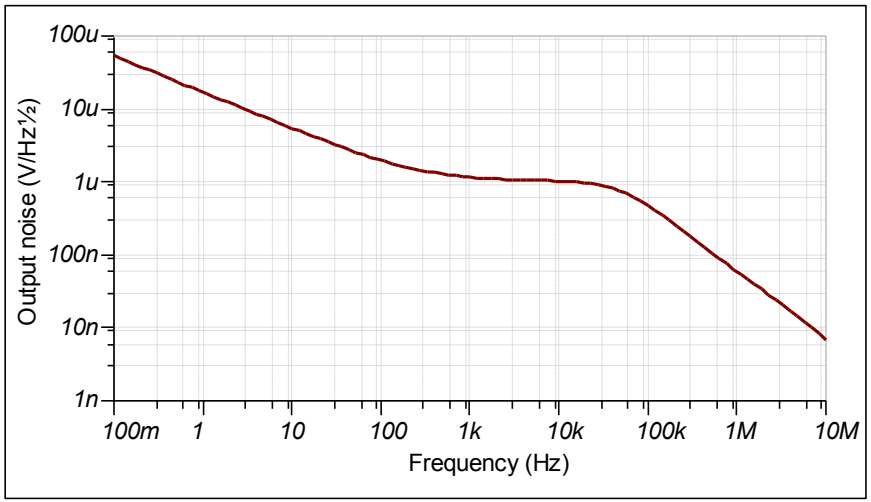
Solutions

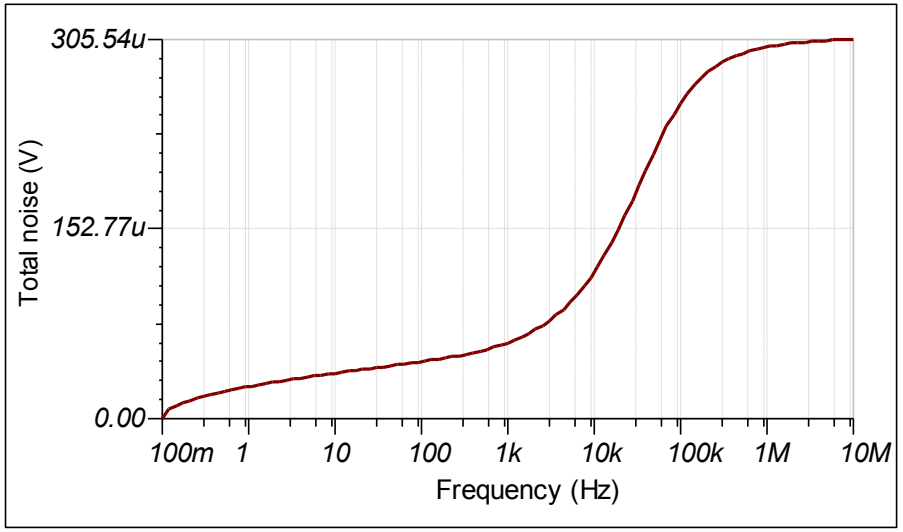
TI Precision Labs – Op Amps

1. **Use simulation to determine the noise spectral density and total rms noise for the circuit below. This circuit was solved by hand in the problems from noise 4. Compare the simulated results to the hand calculation results.**

OPA192	rms output noise
Calculated	247uV
Simulated	305uV



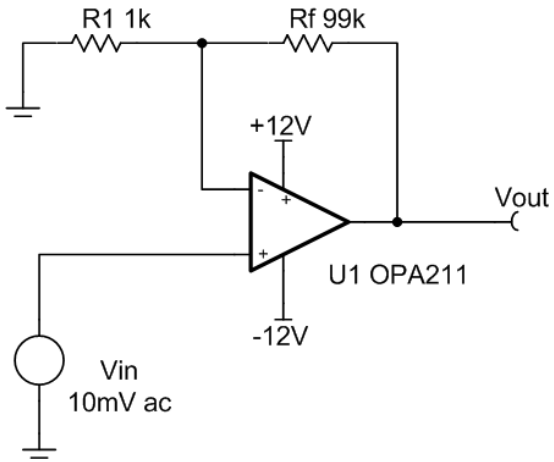




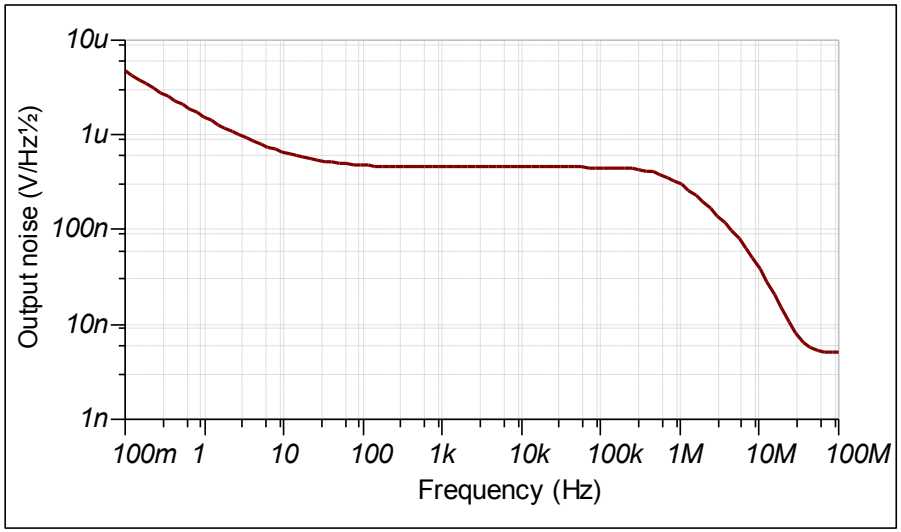
1315-noise 5-problem 1.TSC

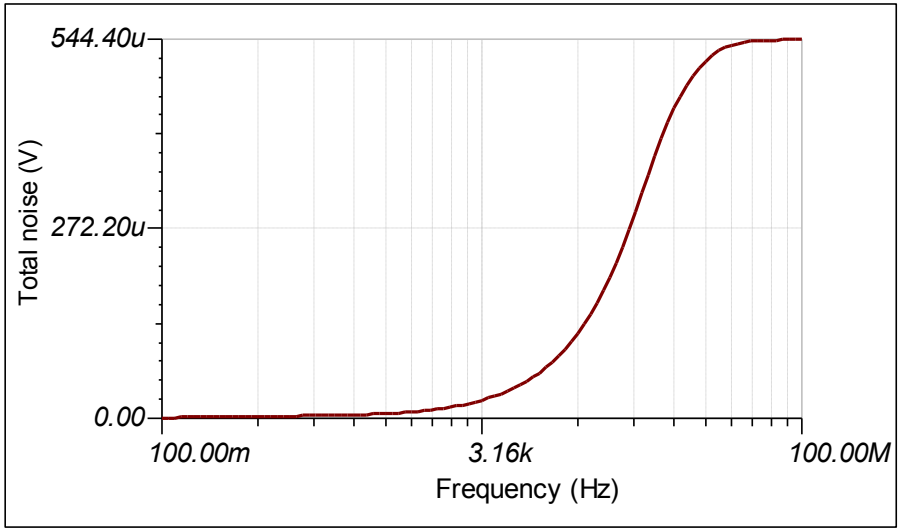
2. Use simulation to determine the noise spectral density and total rms noise for the circuit below. This circuit was solved by hand in the problems from noise 4. Compare the simulated results to the hand calculation results.

OPA211	rms output noise
Calculated	501uV
Simulated	544uV



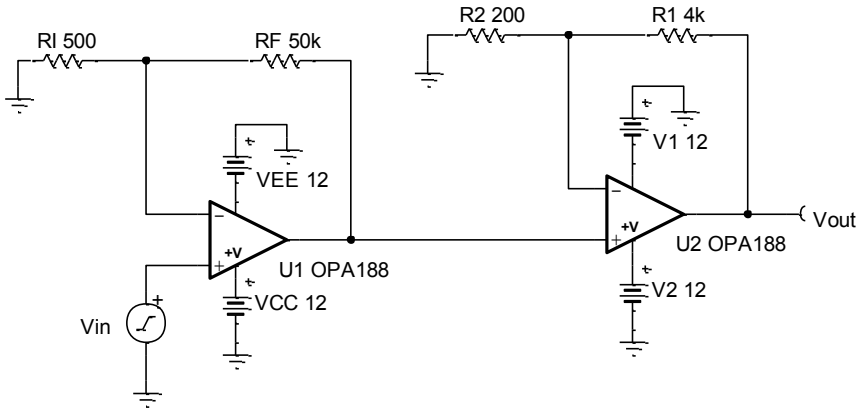
1315-noise 5-problem 2.TSC





3. Use simulation to determine the noise spectral density and total rms noise for the circuit below. This circuit was solved by hand in the problems from noise 4. Compare the simulated results to the hand calculation results.

OPA188	rms output noise
Calculated	3.30mV
Simulated	3.42mV



1315-noise 5-problem 3.TSC