

Noise 7

Multiple Choice Quiz

TI Precision Labs – Op Amps



Quiz: Noise 7

- 1. (T/F) A 10x scope probe is better than a 1x scope probe for noise measurements.**
 - a. True
 - b. False

- 2. (T/F) The bandwidth limiting feature can be used to improve the noise floor.**
 - a. True
 - b. False

- 3. Which of the following is NOT a recommended procedure for measuring 1/f noise?**
 - a. Set scope in ac coupling mode
 - b. Use a 0.001Hz high pass filter.
 - c. Set time scale to 1 sec per division.

- 4. (T/F) Ac coupling should be used for broadband noise measurements.**
 - a. True
 - b. False

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5. What advantage does a spectrum analyzer have over an oscilloscope in noise measurements?

- a. Operation of the spectrum analyzer is fast and simple.
- b. The spectrum analyzer is more accurate
- c. The spectrum analyzer makes it easy to see if you have high frequency content at a specific frequency.
- d. The spectrum analyzer can operate to low frequencies.

6. Which is NOT an important precaution for noise measurements?

- a. Use shield cables to connect to the circuit under test.
- b. Use low ESR capacitors for coupling the circuit under test to the test equipment.
- c. Use linear power supplies or batteries.
- d. Test the noise floor of your equipment.

7. (T/F) The maximum frequency that a spectrum analyzer can measure is called its measurement bandwidth.

- a. True
- b. False

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8. Using a narrow measurement bandwidth will _____.
- a. Improve accuracy and increase the test time.
 - b. Degrade accuracy and decrease the test time.
9. (T/F) The averaging feature on a spectrum analyzer will improve the accuracy of noise measurements.
- a. True
 - b. False

Input Offset Voltage (V_{OS}) & Input Bias Current (I_B)

Multiple Choice Quiz: Solutions

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TEXAS INSTRUMENTS

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