

# Slew Rate 1

Multiple Choice Quiz

TI Precision Labs – Op Amps



## Quiz: Slew Rate 1

1. **When a constant current is applied to a capacitor, the voltage on the capacitor will \_\_\_\_.**
  - a. Increase exponentially.
  - b. Increase linearly.
  - c. Remain constant.
  - d. Oscillate.
  
2. **Slew rate is defined as \_\_\_\_.**
  - a. The maximum rate of change of an input signal.
  - b. The maximum frequency that can be applied before attenuation.
  - c. The maximum rate of change of the output voltage.
  - d. The rate of current consumption of the amplifier.
  
3. **Different model amplifiers have different slew rates. Surveying many different models, you will see slew rate vary from \_\_\_\_.**
  - a. 0.1V/  $\mu$ s to 1000V/us
  - b. 10V/  $\mu$ s to 100V/us
  - c. 1V/ns to 100V/ns
  - d. 0.1V/ms to 1000V/ms

## Quiz: Slew Rate 1

**4. What differential input would you expect when an op amp is in slew rate limit?**

- a. The differential input is the input offset and would range from  $\mu\text{V}$  to  $\text{mV}$ .
- b. The differential input can be volts during slew limit.
- c. The differential input is not affected when an amplifier is in slew limit.

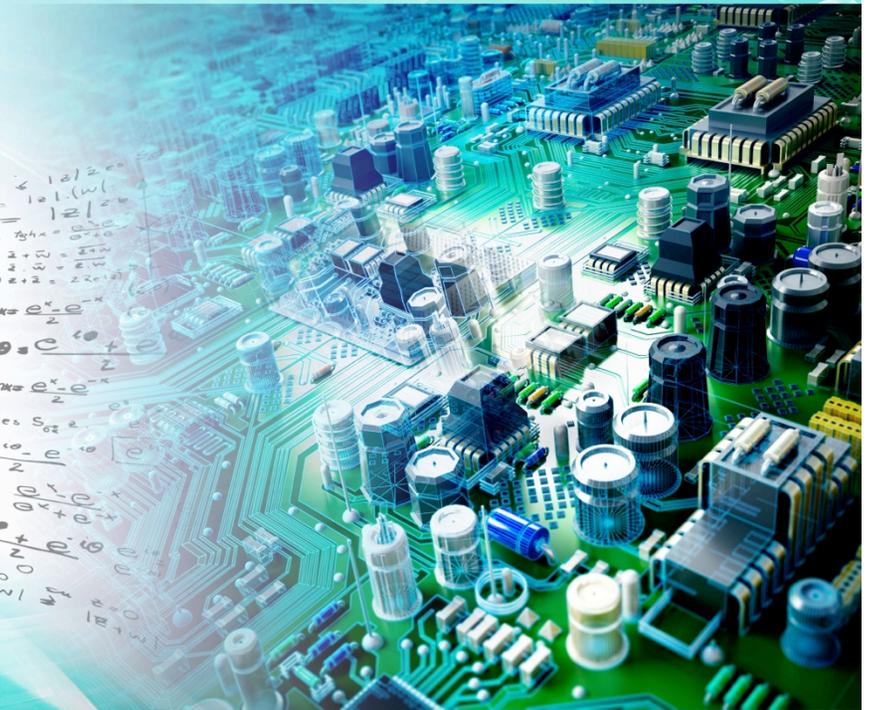
**5. Most amplifier data sheets contain a graph called the “large signal step response” curve. What does this curve illustrate?**

- a. The maximum output swing range for an amplifier.
- b. A large rapid change in load resistance.
- c. The output in slew limit with the input about 80% of the supply range.
- d. The output with a 100mV step applied to the input.

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Multiple Choice Quiz: Solutions

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