

10 Op Amps Test

Your Name:

1. Draw the circuit diagram of an op-amp chip and label the input and output pins.
2. What is the input resistance of an ideal op-amp input pin?
3. What is the output resistance of an ideal op-amp?
4. If an op-amp has a gain bandwidth product of 1 million, what will its gain be at 5000Hz?
5. Draw the circuit diagram of a comparator including two voltage dividers. Label the output.
6. Under what conditions will the comparator output high?
7. Explain how a comparator works.

8. Draw the circuit diagram of an inverting amplifier. Label the input, the virtual earth and the output.

9. What is the input resistance of this circuit?

10. What is the formula for the gain of this circuit?

11. In what two ways does the output differ from the input?

12. Explain why the virtual earth gets its name.

13. Draw the circuit diagram of a non-inverting amplifier. Label the input and the output.

14. What is the input resistance of this circuit?

15. What is the formula for the gain of this circuit?

23. What is the input resistance of this circuit?

24. What is the the gain of this circuit?

25. What is meant by negative feedback?