

Name _____

1. Draw the circuit diagram of the basic inverting amplifier configuration.

Give an expression for the voltage gain of the circuit in terms of the resistors, assuming an ideal op-amp.

Give an expression for the input impedance of the circuit.

Give the resistor values for a voltage gain of -20 and input impedance of 20k.

2. Draw the circuit diagram of the basic non-inverting amplifier configuration.

Give an expression for the voltage gain of the circuit in terms of the resistors, assuming an ideal op-amp.

Give an expression for the input impedance of the circuit.

Give the resistor values for a voltage gain of 20 and input impedance of 20k. You may use resistor values only 1k and higher.