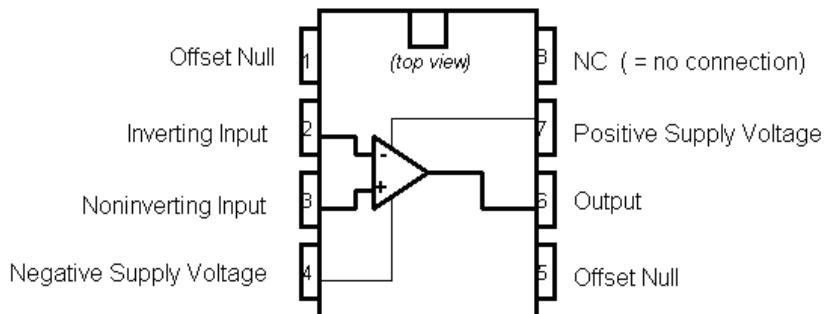
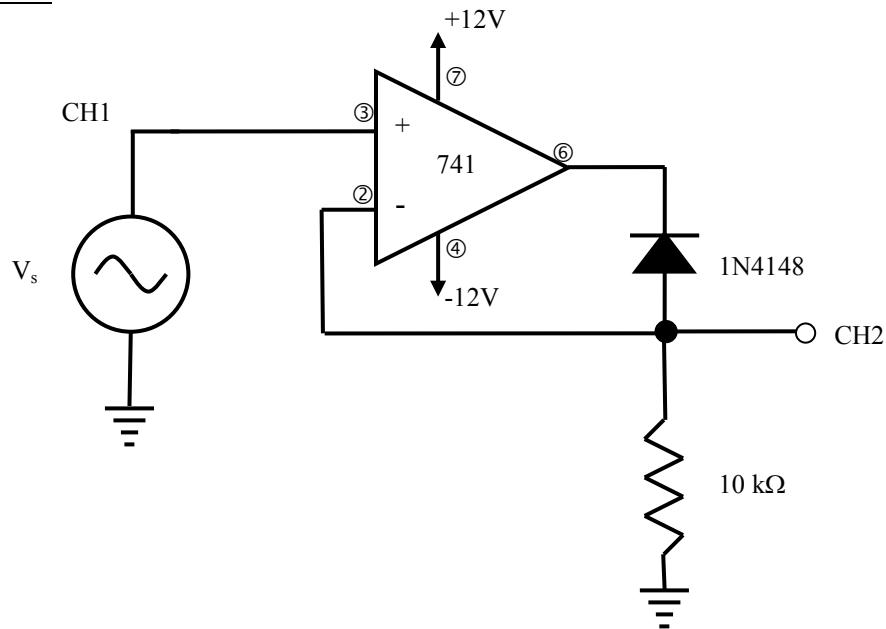


**MUST 382 / EEL 491**

Spring 2014

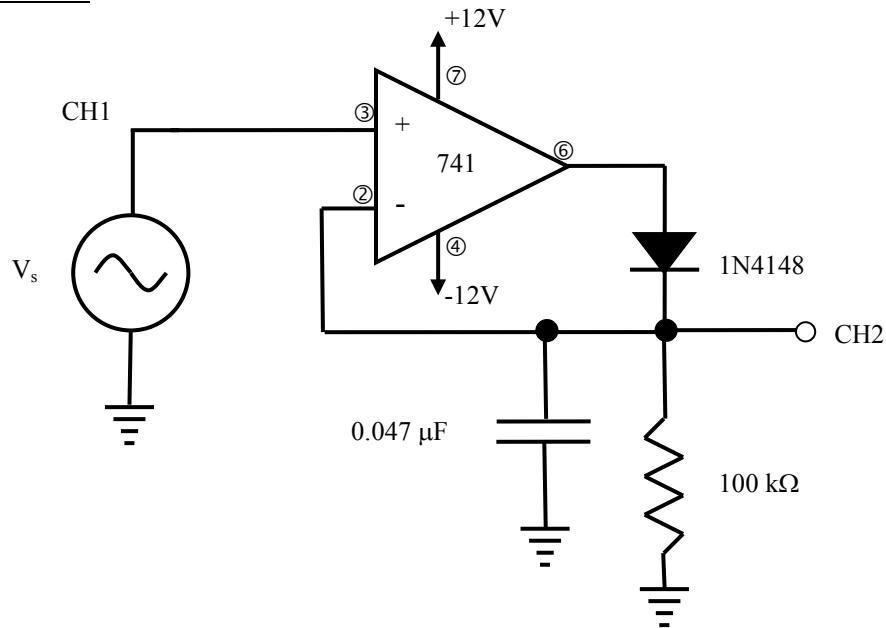
Other circuits for experimentation

Using the bench power supply and your breadboard, carefully assemble the op amp circuit shown below. REMEMBER TO ASSEMBLE THE CIRCUIT WITH THE POWER OFF, then TEST and VERIFY the bench supply to make sure the voltages are correct BEFORE applying power to the circuit. Start with the function generator set for minimum output.

Half-wave rectifier circuit:

Use the function generator (start with 100 Hz) and the oscilloscope to observe simultaneously the source voltage (CH1) and the voltage at the op amp's output (CH2). Try a range of frequencies and determine what is the relationship between the output and the input. Then try reversing the direction of the diode.

Positive peak detector circuit:



Try a range of frequencies and determine what is the relationship between the output and the input. Try some other resistor sizes instead of  $100\text{ k}\Omega$ , and see how this changes the circuit behavior.

Computer-style microphone amplifier

