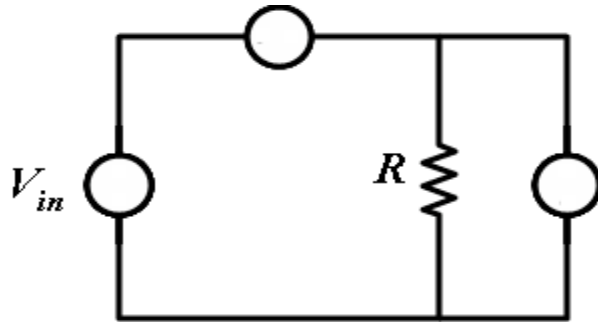


ECE 2A Lab 1 Pre-Lab Questions

1. In the circuit below we wish to measure the current through the resistor and the voltage across it. Which meter is which? Label the voltmeter with “V” and the ammeter with “A”.



2. Complete columns 2 to 4 of the table below by making the appropriate calculations.

TABLE 1: Calculated (columns 2 to 4) & measured (columns 5 & 6) resistances of a series combination of resistors.

Resistors	$R_1 + R_2 + R_3$	$\frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}}$	$\frac{1}{\frac{1}{R_1 + R_2 + R_3}}$	Measured R_s	Measured R_p
$R_1 = 1k\Omega$ $R_2 = 1k\Omega$ $R_3 = 1k\Omega$					
$R_1 = 1k\Omega$ $R_2 = 1k\Omega$ $R_3 = 2k\Omega$					
$R_1 = 1k\Omega$ $R_2 = 1k\Omega$ $R_3 = 3k\Omega$					
$R_1 = 1k\Omega$ $R_2 = 2k\Omega$ $R_3 = 3k\Omega$					
$R_1 = 1k\Omega$ $R_2 = 4.7k\Omega$ $R_3 = 10k\Omega$					

3. From the picture below, what is the output voltage of the +20V supply?

- a) +10V b) +12V c) can't say

