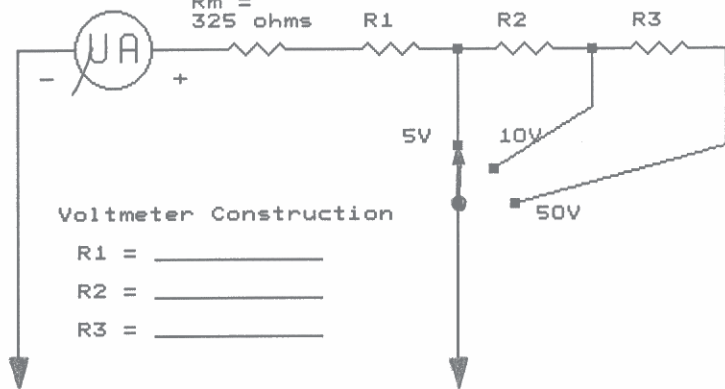


50 micro-amps F.S.  
 $R_m = 325$  ohms



Voltmeter Construction

R1 = \_\_\_\_\_

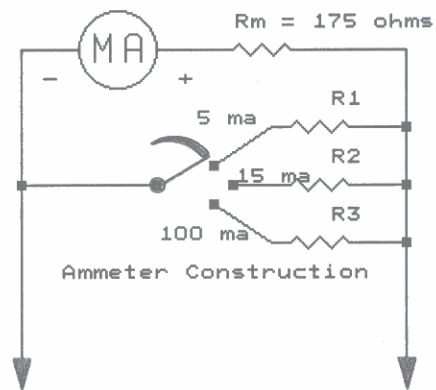
R2 = \_\_\_\_\_

R3 = \_\_\_\_\_

Determine the proper series dropping resistors required for the designated 5V, 10V, & 15V "Full-Scale" switch selections:

This 50 micro-amp meter movement is considered to be a "Sensitivity" of \_\_\_\_\_ Ohms/Volt

1 milli-amp F.S.



R1 = \_\_\_\_\_

R2 = \_\_\_\_\_

R3 = \_\_\_\_\_

Determine the appropriate shunt resistances required for the switch selections of 5 ma, 15 ma, and 100 ma (Note that a "Shorting" type switch is used)

This 1 milliamp Meter is considered to be a \_\_\_\_\_ millivolt meter.

- \* A 20  $\mu$ a meter movement, with an internal resistance ( $R_m$ ) of 318 ohms, is considered to have a "sensitivity" of \_\_\_\_\_ Ohms/Volt.
- \* A 50  $\mu$ a ammeter, with an internal resistance ( $R_m$ ) of 212 ohms, will read \_\_\_\_\_ mv across the meter, when reading full scale.
- \* A 40K-Ohm/Volt sensitivity, means that the meter will read full scale at \_\_\_\_\_ amps through the meter.
- \* A Voltmeter constructed from a 250  $\mu$ a movement, to read 60V full scale, will require a total resistance of \_\_\_\_\_ ohms.
- \* A Voltmeter constructed from a 100  $\mu$ a movement, that has a total resistance of 150K-ohms, would require \_\_\_\_\_ V to read full scale.