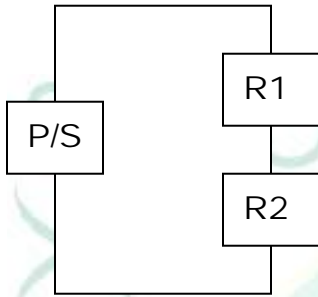


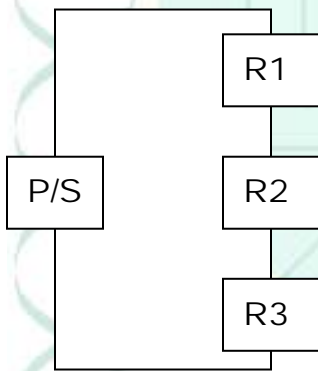
ELT-111 CIRCUIT ANALYSIS I

Series Circuit Sample Test



1 - 10 For the circuit above, complete the following chart.

P/S	R1	R2	Rt	V1	V2	Vt	I1	I2	It	P1	P2	Pt
12	60Ω			5 v								



11 - 15 For the circuit above, complete the following chart.

P/S	R1	R2	R3	Rt	V1	V2	V3	It	Pt
	20	40		100		8 v		200 ma	

16. High internal resistance corresponds with good voltage regulation in a power supply.

17. Voltage divider rule is a method by which current in a series circuit can be determined without first calculating the voltage in a circuit.

18. The current that flows through series elements of a circuit is the same in each element.

19. In double-subscript notation, $V_{ab} = +7V$ denotes that

- a. Point "a" is 7V more positive than point b.
- b. Point "b" is 7V more positive than point a.
- c. Point "a" is +7V with respect to ground.
- d. Point "b" is +7V with respect to ground.

20. The voltage measured across an open component in a series circuit is equal to _____.

21. A 100 ohm resistor is installed in a circuit in which it would normally be expected to dissipate 1.1 watts of current. You discover that this resistor has failed and requires replacement. Because of deterioration of the resistor, you are not able to determine its power dissipation capability. Which of the following resistors would be an appropriate replacement for the resistor?

- a. A 100 ohm, 1 watt resistor
- b. A 100 ohm, 2 watt resistor
- c. A 100 ohm, 5 watt resistor
- d. A 200 ohm, 2 watt resistor

22. In your own words define current flow

23. In the space below, draw a circuit with a power source, one resistor and a multimeter connected to measure current.

24. In the space below, draw a circuit with a power source, one resistor and a multimeter connected to measure voltage.