

I. PART 1

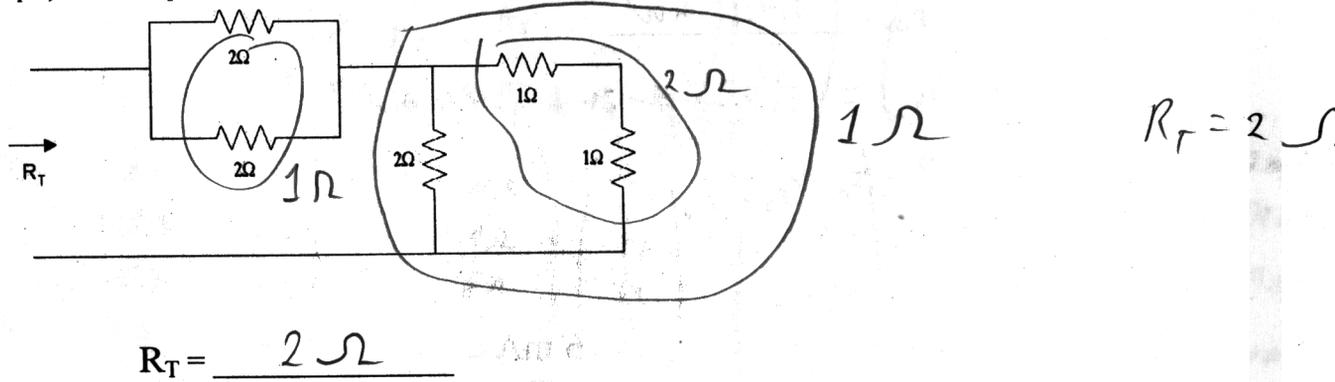
Short Answer / Fill in the Blank

1. (8 pts) Three resistors are in parallel and powered by a voltage source; their values are 22 kΩ, 5.2 kΩ, and 12 MΩ.

- a. Which resistor carries the most current? 5.2 kΩ
- b. What is the equivalent resistance of the parallel combination of these 3 resistors? 4.20 kΩ
- c. If the voltage source is 58 volts, how much current flows through the 22 kΩ resistor? 13.8 mA

$$\frac{58V}{4.20k\Omega}$$
- d. If the voltage source is 95 volts, what is the voltage across the 12MΩ resistor? 95V

2. (8 pts) A series-parallel circuit is shown below. Find the total equivalent resistance, R_T .



3. (8 pts) For the circuit shown below, solve for the voltage across the 12 kΩ resistor.

