

Calculating Resistance

Series Resistance

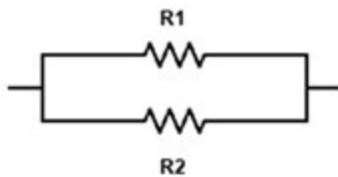
$$R_{\text{total}} = R_1 + R_2 + \dots + R_N$$

Parallel Resistance

$$R_{\text{total}} = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \dots + \frac{1}{R_N}}$$

Hint: When resistors of the same value are in parallel, the resistance is the value of one resistor divided by the number of resistors.

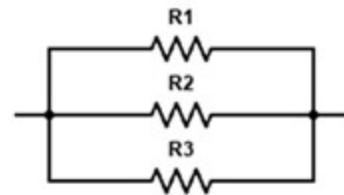
Assuming all the resistors below have a value of 90Ω , calculate the following resistances:



1. _____



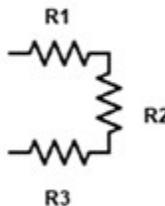
2. _____



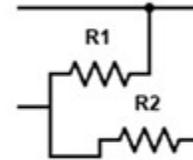
3. _____



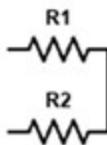
4. _____



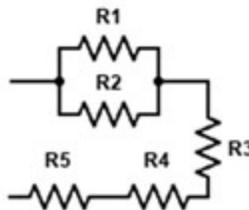
5. _____



6. _____



7. _____



8. _____