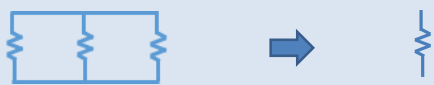


CONCEPT: SOLVING RESISTOR CIRCUITS

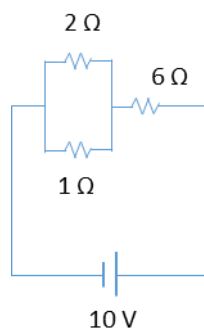
- In Circuit problems, you will need to find the CURRENT and VOLTAGE of different Resistors.

SERIES CONNECTION	PARALLEL CONNECTION
- Equivalent Resistance: $R_{eq} = R_1 + R_2 + R_3$ - Share [CURRENT / VOLTAGE] with EACH OTHER - Share [CURRENT / VOLTAGE] with EQUIVALENT Resistor 	- Equivalent Resistance: $1/R_{eq} = 1/R_1 + 1/R_2 + 1/R_3$ - Share [CURRENT / VOLTAGE] with EACH OTHER - Share [CURRENT / VOLTAGE] with EQUIVALENT Resistor 

- STEPS for Solving Resistor Circuits:

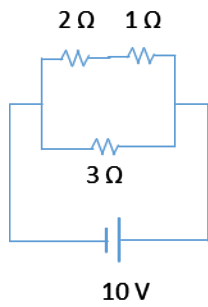
- 1) “Collapse” down to ONE EQUIVALENT Resistor
- 2) Find VOLTAGE and CURRENT on Equivalent Resistor
- 3) “Work backwards” noting VOLTAGE and CURRENT on EACH Resistor

EXAMPLE: What is the current and voltage of each of the resistors in the following circuit?



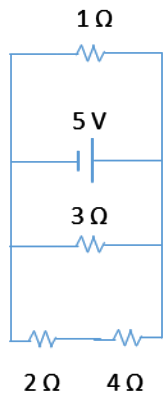
PRACTICE: FIND CURRENT & VOLTAGE IN ALL RESISTORS

What is current and voltage across each resistor below?



EXAMPLE: FIND CURRENT OF ONE CAPACITOR

What is the current on the $3\ \Omega$ resistor below?



PRACTICE: FIND VOLTAGE OF THE BATTERY

What is the voltage of the battery below?

