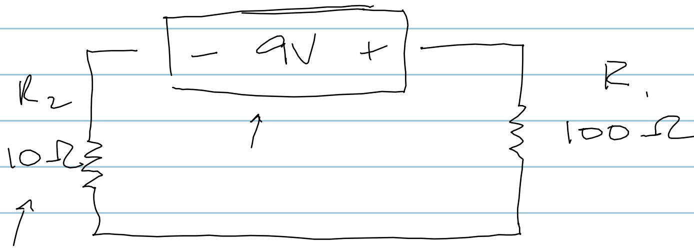
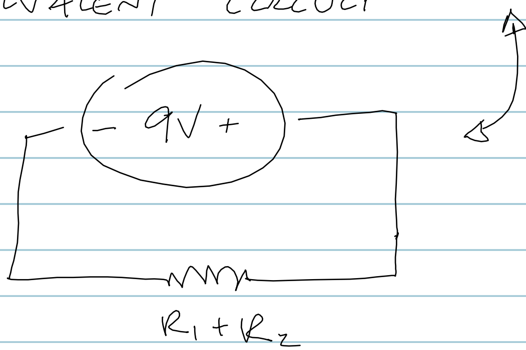
CRAFTOE — V. DIVIDERS — SAT 28^{TH}



① $V = IR$ VOLTAGE = CURRENT × RESISTANCE

② EQUIVALENT CIRCUIT



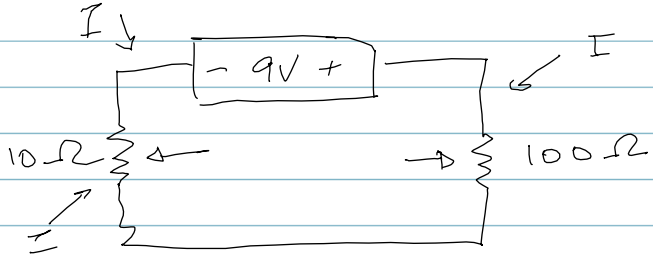
V = VOLTS
I = AMPS
R = OHMS

$$V = I \; R$$

$$\frac{9V}{R} \qquad \frac{? \quad 110\Omega}{R}$$

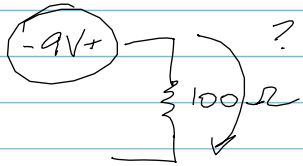
$$\frac{V}{R} = I \qquad \frac{9}{110} = \boxed{.0818\,A}$$

(3) CURRENT IS CONSTANT EVERYWHERE IN A SEQUENTIAL CIRCUIT



9V SOURCE
110Ω RESISTANCE } CURRENT

STEP 2 CALCULATE VOLTAGE DROPS



$V = 0.0818 \times 100\Omega$

$V = 8.18$ VOLT DROP ACROSS 100Ω RESISTOR

$V = 0.0818 \times 10\Omega$

$V = 0.818\,V$

TOTAL DROP

$\Delta V_{R_1} = 8.18$

$+ \Delta V_{R_2} = .818$

$8.998 \cong 9V$