Seth

150

ECEN 106-02 with Brother Jack (Winter 2023)

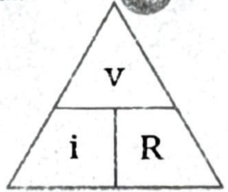
Seth

CES Honor Code

Brigham Young University–Idaho (BYU-Idaho) and other Church Educational System institutions exist to provide an education in an atmosphere consistent with the ideals and principles of The Church of Jesus Christ of Latter-day Saints. That atmosphere is created and preserved by a community of faculty, administration, staff, and students who voluntarily commit to conduct their lives in accordance with the principles of the gospel of Jesus Christ and who strive to maintain the highest standards in their personal conduct regarding honor, integrity, morality, and consideration of others. By accepting appointment, continuing in employment, being admitted, or continuing class enrollment, each member of the BYU-Idaho community personally commits to observe these Honor Code standards approved by the Board of Trustees "at all times and in all things, and in all places" (Mosiah 18:9):

- Be honest.
- Live a chaste and virtuous life, including abstaining from any sexual relations outside a marriage between a man and a woman.
- Respect others, including the avoidance of profane and vulgar language. Obey the law and follow campus policies.
- Abstain from alcoholic beverages, tobacco, tea, coffee, vaping, and substance abuse.
- Participate regularly in Church services (required only of Church members).
- Observe BYU-Idaho's dress and grooming standards.
- Encourage others in their commitment to comply with the Honor Code.

Ohm's Law



$$v = iR$$

$$R = \frac{v}{i}$$

$$i = \frac{v}{R}$$

Resistors

$R_1 \| R_2$

$R_{eq} = \frac{R_1 \cdot R_2}{R_1 + R_2}$

Resistors in parallel

$$R_{eq} = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} \dots + \frac{1}{R_n}}$$

Resistors in Series

$$R_{eq} = R_1 + R_2 + R_3 + \cdots + R_n$$

DC Power

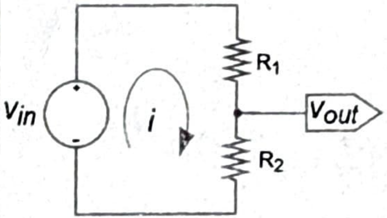
$$p = vi = i^2R = v^2/R$$

Units

Charge → Coulomb (C)
Resistance → Ohms (Ω)
Current → Amperes (A)
Voltage → Volts (V)
Power → Watts (W)
Energy → Joules (J)

Voltage Divider

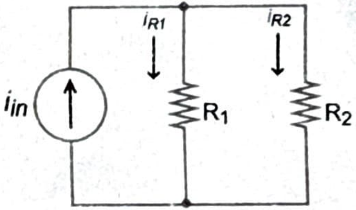
$$v_{out} = v_{in}\left(\frac{R_2}{R_1 + R_2}\right)$$



Current Divider

$$i_{R_1} = i_{in}\left(\frac{R_2}{R_1 + R_2}\right)$$

$$i_{R_2} = i_{in}\left(\frac{R_1}{R_1 + R_2}\right)$$



Created by G. Ikpaetuk and D. Agbezukey

TAU BETA PI

"I didn't do jack diddly." -Jason

"It gives me the giggles." -Jason

Group 2 Lab 2 during lab 4

"By golly gum drops!" -Jason