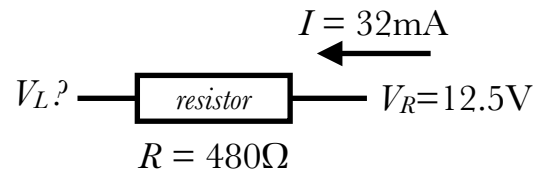


Physics 102 Homework #8

first draft due Wednesday, March 29th
final draft due Sunday, April 2nd

1a. This resistor has a resistance of 480Ω , and 32mA of current flows to the left into it. The right end of the resistor is at a potential of $V_R = 12.5\text{V}$. What is the potential difference ΔV across the resistor?

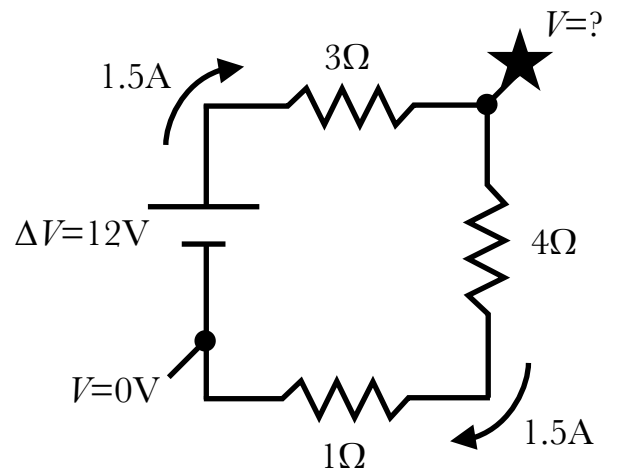


1b. What is the potential V_L of the left end of the resistor?

1c. What is the power output by the resistor?

1d. What is the current that flows out of the resistor?

- 2.** A 12V battery makes 1.5A of current through a 4Ω, 3Ω, and a 1Ω resistor.
a. How much power does the battery supply?



- 2b.** How much power is dissipated by the 4Ω resistor?

- 2c.** If the potential at the negative end of the battery is 0V, what is the potential V at the star?

3. A battery causes 0.35A of current to flow through two resistors, 70Ω and 120Ω . What is the emf of the battery?

