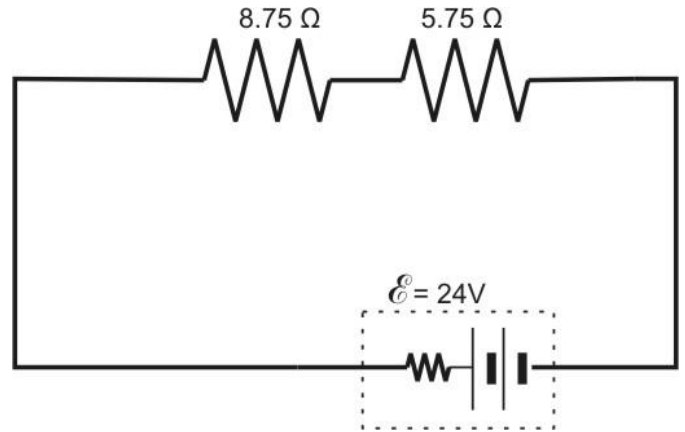


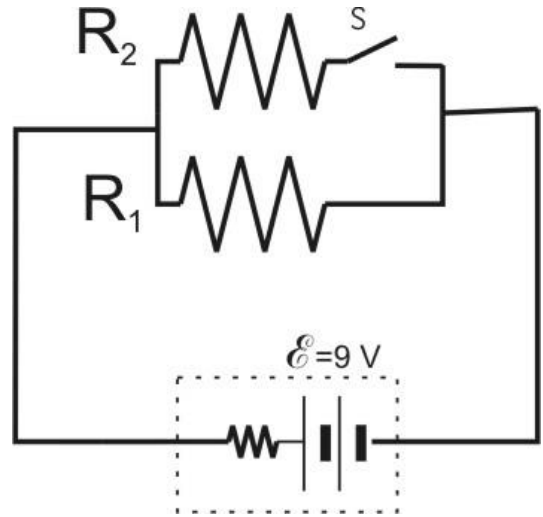
Name: _____

Worksheet 7.3 Electromotive force

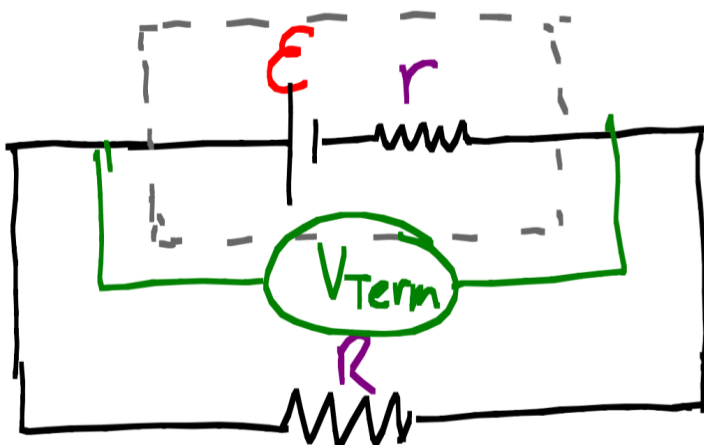
1. The current measured flowing through the circuit illustrated on the right is 1.6 A, what is a) the internal resistance of the battery? b) The terminal voltage of the battery?



2. Resistors R_1 and R_2 (on the left) are known to be of the same unknown resistance. When the switch "S" is open, 4 A are measured flowing through the circuit. When the switch is closed, 7.2 A are measured flowing through the circuit. What is the internal resistance of the cell?



3. A 12.0V battery supplies a current of 4.0A across the battery. If $R = 2.65\Omega$, what is the internal resistance of the battery?



- 1a) 0.5Ω b) 23.2 V 2) 0.25Ω 3) 0.35Ω