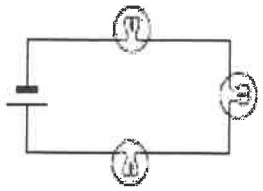
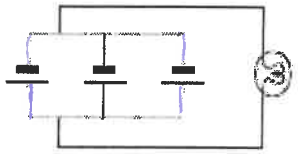
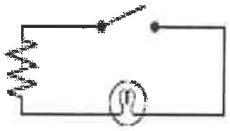
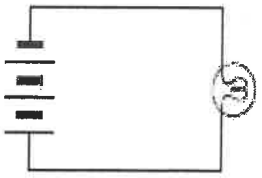
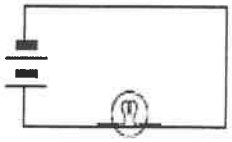
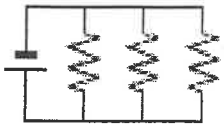
Overview

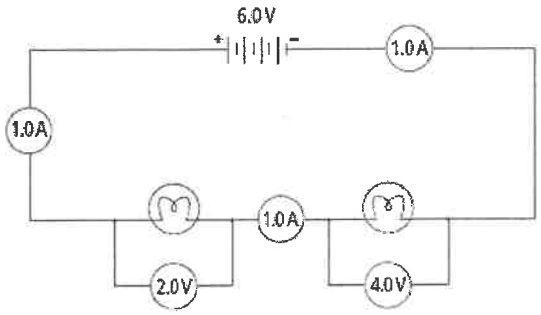
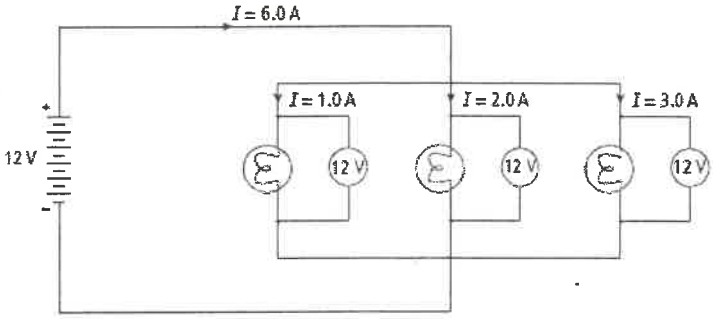
Match each Description on the left with the Circuit on the right.
Each Circuit may be used as often as necessary.

Description	Circuit
71. Three cells in series. 72. Three cells in parallel. 73. Three resistors in series. 74. Three resistors in parallel. 75. A circuit in which no current is flowing.	A.  B.  C.  D.  E.  F. 

Overview of Series and Parallel Circuits:

What happens to the current, voltage, and resistance in series and parallel circuits?

The table below summarizes the effects that series circuits and parallel circuits have on the current, voltage, and resistance of circuits:

Series circuit	**Parallel circuit**
	
Current: The current _____ the whole circuit is _____ throughout and is ____ to the total current supplied by the source. **Formula:** $I_T =$	**Current:** The current _____ each pathway of the circuit _____ to the total current supplied by the source. **Formula:** $I_T =$
Voltage: The voltages _____ each of the loads in the circuit _____ to the voltage supplied by the source. **Formula:** $V_T =$	**Voltage:** The voltages _____ each of the loads in the circuit are _____ and to the voltage supplied by the source. **Formula:** $V_T =$
Resistance: Resistors placed in series _____ the total resistance of the circuit. As a result, the total current throughout the entire circuit _____. **Formula:** $R_T =$	**Resistance:** Resistors placed in parallel _____ the total resistance of the circuit. As a result, the total current throughout the entire circuit _____. **Formula:** $\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$