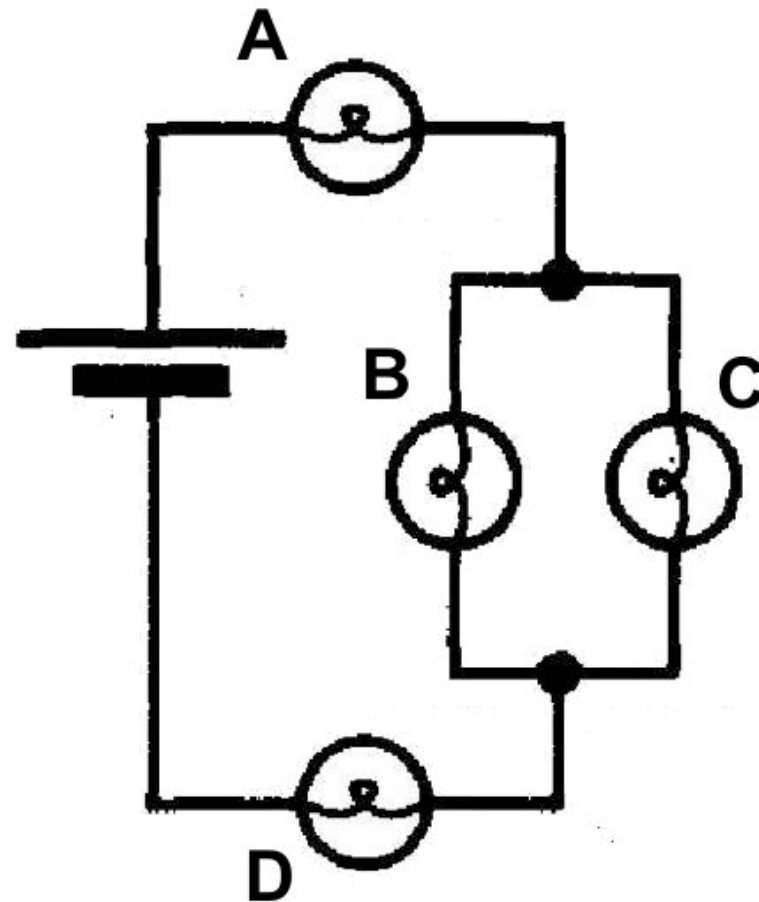


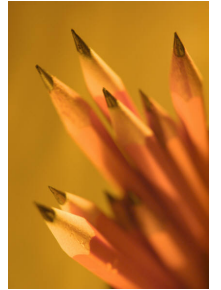


Which of the bulbs in the following circuit is (are) the brightest?

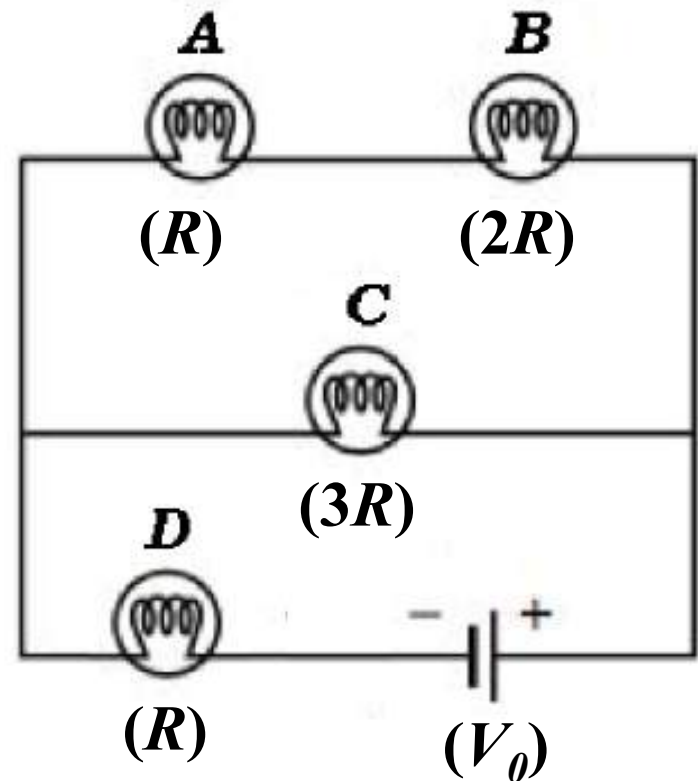
1. A
2. B
3. C
4. D
5. B and C
6. A and D
7. Something else
8. You can't tell from the information given



Sample Problem

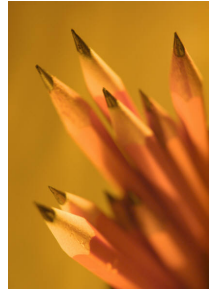


- How do the currents in resistors A and B compare?
- How do the voltage drops across resistors A and B compare?
- How does the current in and voltage drop across resistor C compare to those in A and B?
- Find the current in resistor D.

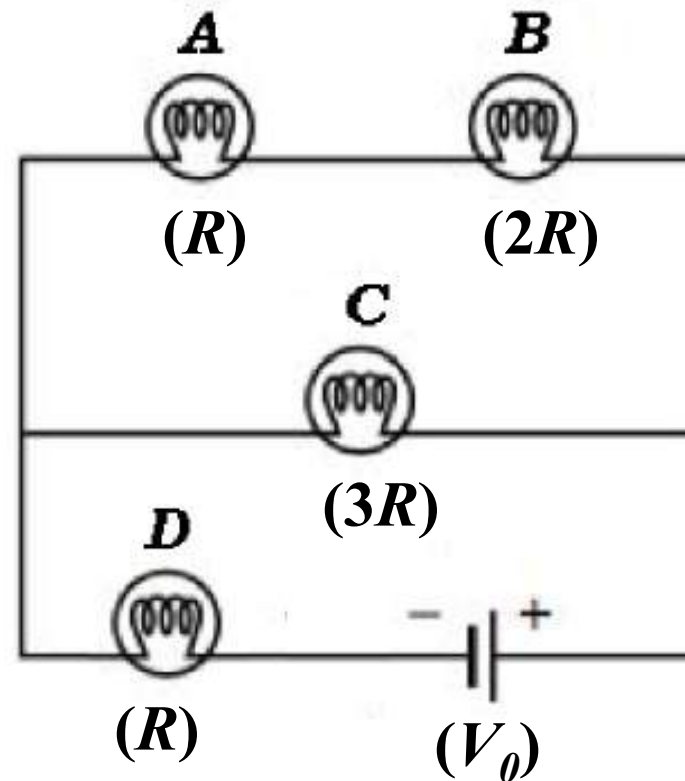


$$I_0 = V_0 / R$$

Sample Problem

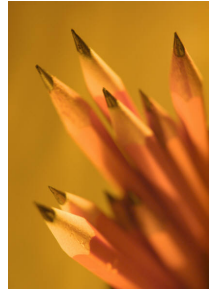


- If bulb D is removed from its socket, how does the brightness of the three bulbs A, B, and C change?

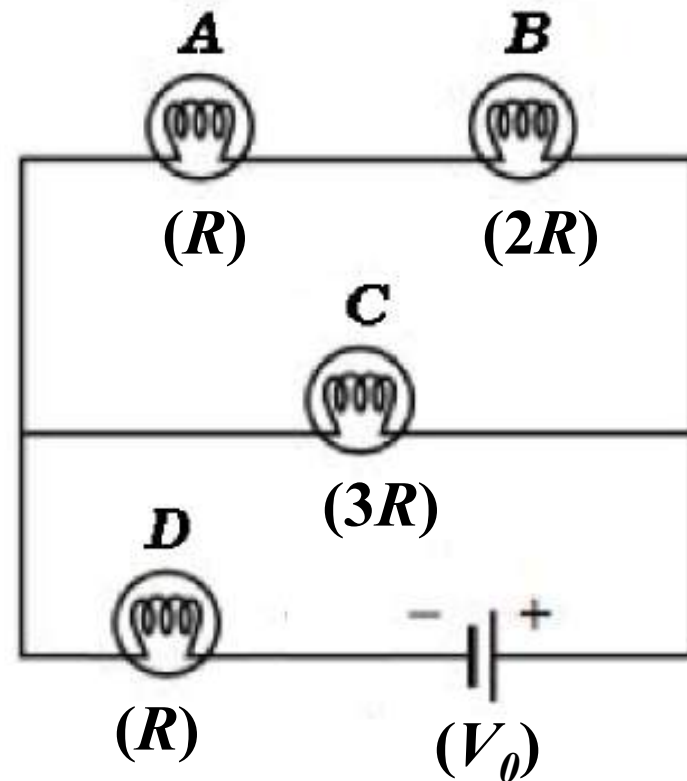


$$I_0 = V_0 / R$$

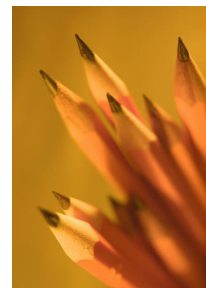
Sample Problem



- If bulb D is put back in its socket, and now bulb C is removed, rank the brightness of the three bulbs A, B, and D?

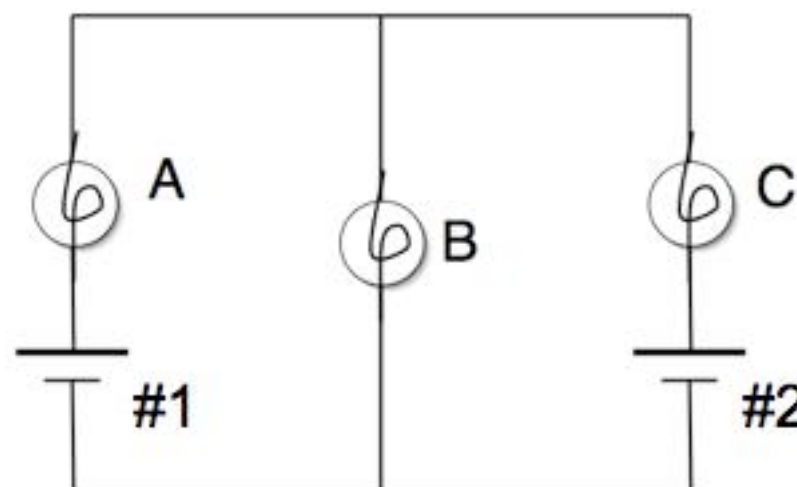


$$I_0 = V_0 / R$$



Use Kirchhoff's principles to find:

- the current through each of the bulbs and
- the current through each of the batteries.



$$\#1 = 6V$$

$$\#2 = 3V$$

$$A = B = C = 3\Omega$$