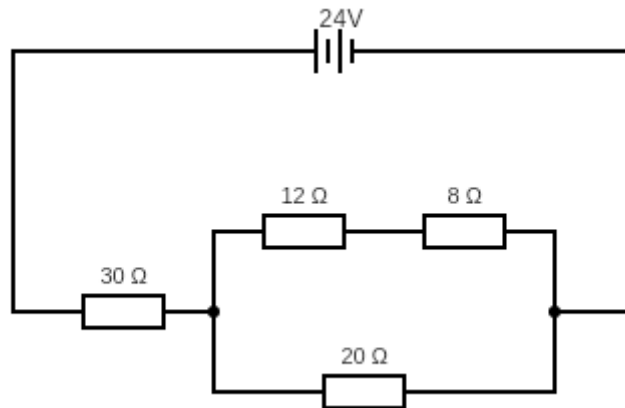


Short Assessment

1. The battery of e.m.f 24V and negligible internal resistance is connected to three resistors as shown in the diagram below.



Calculate,

- (a) the total resistance in the circuit. (3)

..... Ω

- (b) the current flowing through the 30Ω resistor. (2)

..... A

- (c) the potential difference across the 20Ω resistor. (3)

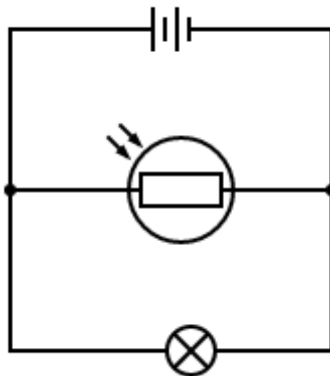
(d) the potential difference across the 12Ω resistor.

(3)

(e) the power dissipated in the 8Ω resistor.

(3)

-
2. The circuit given below shows a battery with negligible internal resistance connected to a light dependent resistor (LDR) and a lamp. The lamp has a fixed resistance.



- (a) State what happens to the resistance of the LDR when the intensity of the light falling on it increases.

(1)

- (b) State and explain what happens to the brightness of the lamp when the intensity of the light falling on the LDR increases?

(3 marks)

- End of Test -