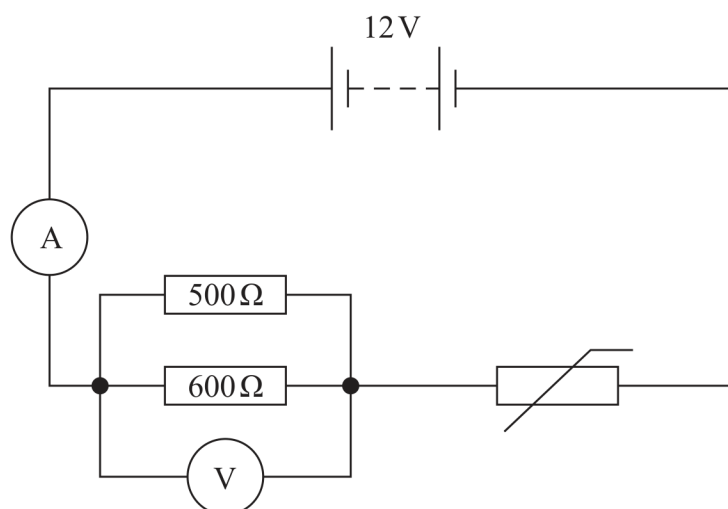


- 14 A student set up the circuit shown to investigate the properties of a negative temperature coefficient thermistor.



The power supply has negligible internal resistance.

- (a) (i) Show that the voltmeter reading was about 6 V.

ammeter reading = 23 mA

(3)

- (ii) Calculate the power dissipated by the thermistor.

(3)

Power = .....

- (b) The student decreases the temperature of the thermistor.

Explain the effect of decreasing the temperature of the thermistor on the ammeter and voltmeter readings.

(4)

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(Total for Question 14 = 10 marks)