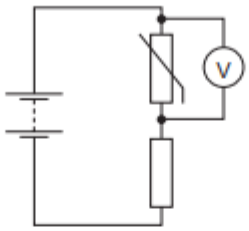
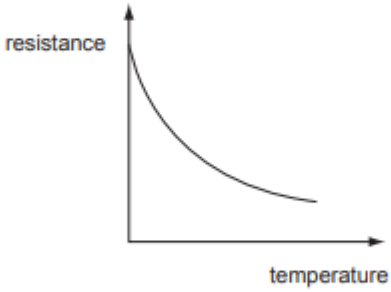
Input Transducer Worksheet

Q1 (W.B) page # 131

The diagram shows a thermistor in a potential divider. A voltmeter is connected across the thermistor.



The graph shows how the resistance of the thermistor changes with temperature.

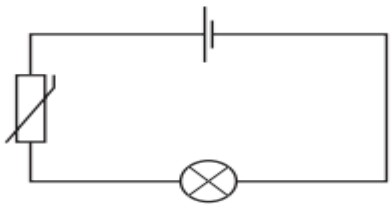


As the thermistor becomes warmer, what happens to its resistance and what happens to the reading on the voltmeter?

	resistance	voltmeter reading
A	decreases	decreases
B	decreases	increases
C	increases	decreases
D	increases	increases

Q3 (W.B) page # 132

When the thermistor in the circuit below is heated, the current in the lamp increases.



Why does this happen?

A The resistance of the lamp decreases.

B The resistance of the lamp increases.

C The resistance of the thermistor decreases.

D The resistance of the thermistor increases.

Input Transducer Worksheet

Q1 W.B

Pg # 134

Fig. 10.1 shows a circuit with a 1.2 kΩ resistor and a thermistor in series. There is no current in the voltmeter.

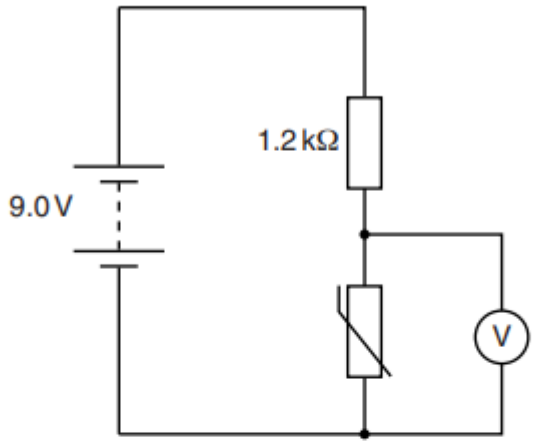


Fig. 10.1

Calculate the voltmeter reading when the resistance of the thermistor is 3.6 kΩ.

voltmeter reading = ... [3]