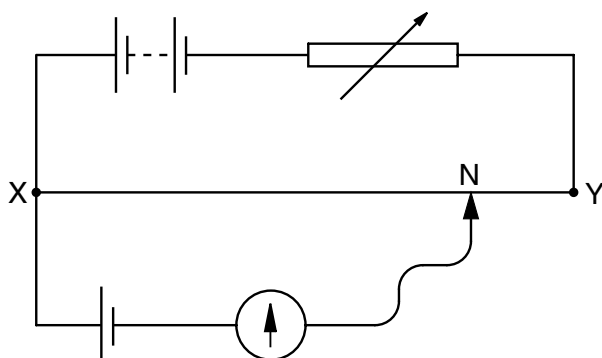


- 35 In the potentiometer circuit below, the moveable contact is placed at N on the bare wire XY, such that the galvanometer shows zero deflection.

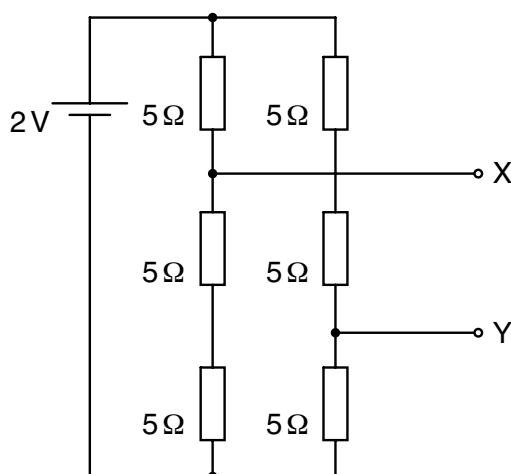


The resistance of the variable resistor is now increased.

What is the effect of this increase on the potential difference across the wire XY and on the position of the moveable contact for zero deflection?

	potential difference across XY	position of moveable contact
<b>A</b>	increases	nearer to X
<b>B</b>	increases	nearer to Y
<b>C</b>	decreases	nearer to X
<b>D</b>	decreases	nearer to Y

- 36 Six resistors, each of resistance  $5\ \Omega$ , are connected to a  $2\text{ V}$  cell of negligible internal resistance.



What is the potential difference between terminals X and Y?

- A**  $\frac{2}{3}\text{ V}$       **B**  $\frac{8}{9}\text{ V}$       **C**  $\frac{4}{3}\text{ V}$       **D**  $2\text{ V}$