

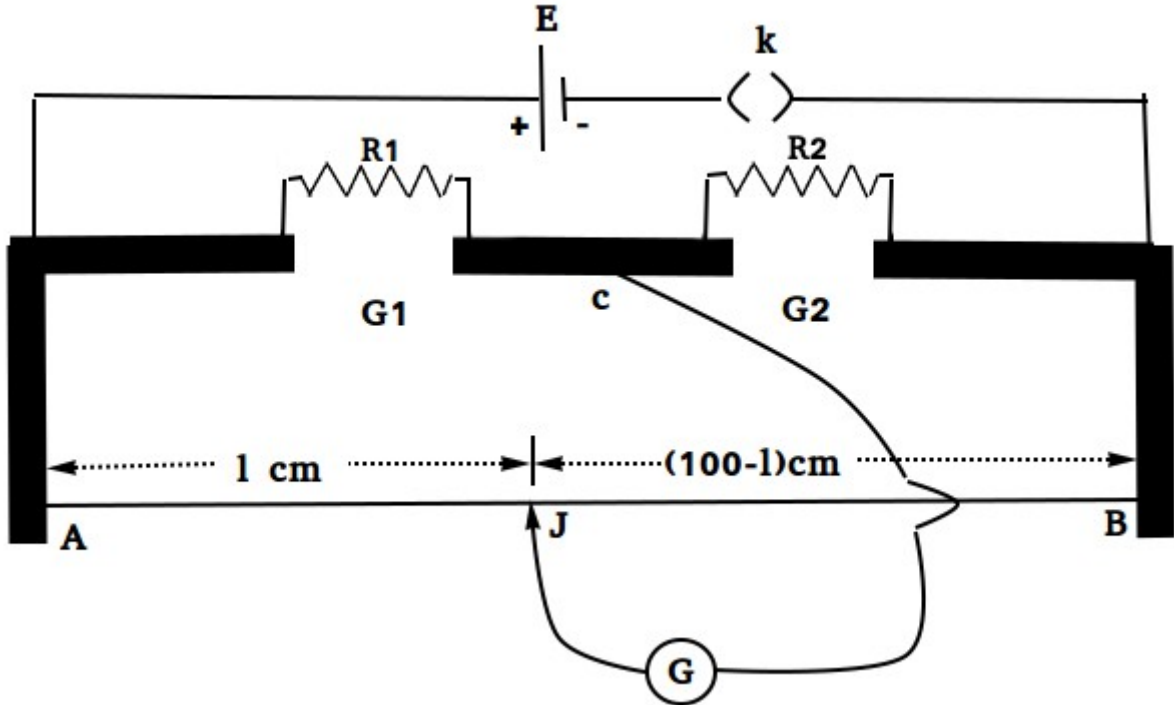
Metre Bridge II

Aim:

To compare the **resistances** of the given two resistors.

Apparatus:

Metre Bridge, Cells, Key, Resistance Box, Carbon Resistances, Galvanometer, Jockey, Breadboard etc.



Theory:

According to the Wheatstone's principal, when bridge is balanced at a balancing length l

$$\frac{R_1}{R_2} = \frac{lr}{(100-l)r} = \frac{l}{(100-l)} \quad \text{where } r \text{ is the resistance per unit length of the wire AB.}$$

Observations:

1. To find the ratio of resistances

Resistance R_1 is in	Balancing length (l) cm	(100 -l) cm	$\frac{R_1}{R_2} = \frac{l}{(100-l)}$
Left gap			
Right gap			

Mean $\frac{R_1}{R_2} =$

RESULTS:

1. The Ratio of Resistances of given resistors =