

## Most Repeated Questions in JEE Main Physics from Combination of resistors

Q: A wire of resistance  $R$  is bent into an equilateral triangle and an identical wire is bent into a square. The ratio of resistance between the two end points of an edge of the triangle to that of the square is

Q: A wire of resistance  $9\Omega$  is bent to form an equilateral triangle. Then the equivalent resistance across any two vertices will be \_\_\_\_\_ ohm.

Q: The effective resistance between A and B, if resistance of each resistor is  $R$ , will be :

(A)  $8R/3$  (B)  $4R/3$  (C)  $2/3R$  (D)  $5R/3$

Q: A wire of resistance  $20\Omega$  is divided into 10 equal parts, resulting pairs. A combination of two parts are connected in parallel and so on. Now resulting pairs of parallel combination are connected in series. The equivalent resistance of final combination is \_\_\_\_\_  $\Omega$ .

Q: The equivalent resistance between A and B is :

(A)  $18\Omega$  (B)  $27\Omega$  (C)  $19\Omega$  (D)  $25\Omega$

Q: Two resistance of  $100\Omega$  and  $200\Omega$  are connected in series with a battery of 4 V and negligible internal resistance. A voltmeter is used to measure voltage across  $100\Omega$  resistance, which gives reading as 1 V. The resistance of voltmeter must be \_\_\_\_\_  $\Omega$ .

Q: Equivalent resistance between the adjacent corners of a regular  $n$ -sided polygon of uniform wire of resistance  $R$  would be :