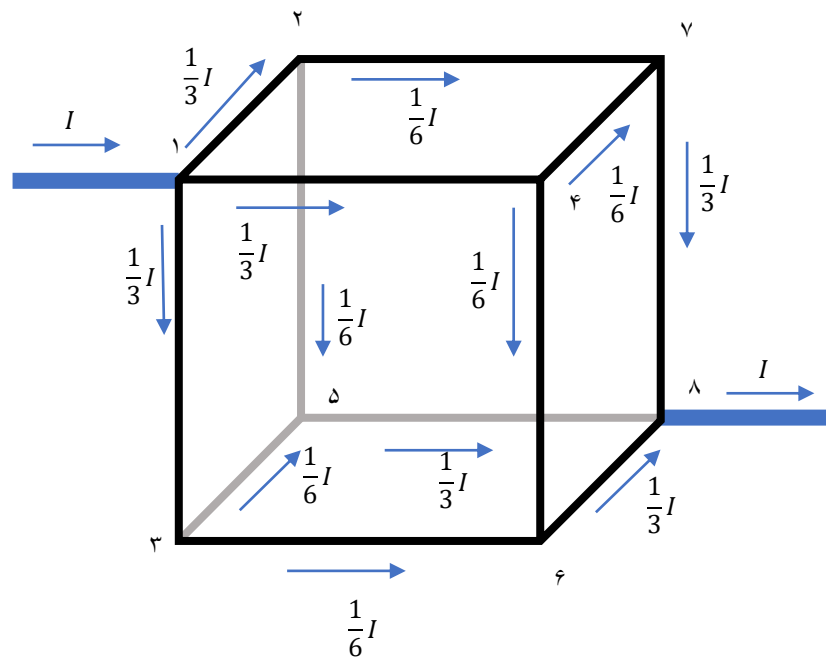


$$P = I^2 R$$

$$\frac{1}{9} I^2 R + \frac{1}{9} I^2 R + \frac{1}{9} I^2 R + \frac{1}{36} I^2 R + \frac{1}{36} I^2 R + \frac{1}{36} I^2 R + \frac{1}{36} I^2 R + \frac{1}{36} I^2 R + \frac{1}{36} I^2 R + \frac{1}{9} I^2 R + \frac{1}{9} I^2 R + \frac{1}{9} I^2 R$$



$$P = I^2 R$$

$$\frac{1}{9}I^2R + \frac{1}{9}I^2R + \frac{1}{9}I^2R + \frac{1}{36}I^2R + \frac{1}{36}I^2R + \frac{1}{36}I^2R + \frac{1}{36}I^2R + \frac{1}{36}I^2R + \frac{1}{36}I^2R + \frac{1}{9}I^2R + \frac{1}{9}I^2R + \frac{1}{9}I^2R$$

$$\frac{1}{3}I^2R + \frac{1}{6}I^2R + \frac{1}{3}I^2R = \frac{5}{6}I^2R = P$$

$$P = I^2 R_{eq} \longrightarrow R_{eq} = \frac{P}{I^2} \longrightarrow R_{eq} = \frac{\cancel{\frac{5}{6}I^2}R}{\cancel{I^2}} = \frac{5}{6}R$$