Question#19746

12 volts is applied across a 4 ohm resistor. How much power is dissipated by the resistor?

Answer:

$W = IU,$ Were I – current, voltage

According to the Ohm's law:

$I = \frac{U}{R}$ >>

$W = \frac{U}{R}U = \frac{U^2}{R}$

$W = \frac{12^2}{4} = 36\,W$

Answer: 36 W.