Answer on Question #44868, Physics, Electric Circuits

A current of 4A flows through a wire of potential difference 20V calculate the quantity of the charge that flows through it one minute

Solution :

By definition of the current :

$$\frac{dq}{dt} = I$$

Where $q\ is\ charge, I\ is\ current$

Then $\Delta q = I \cdot \Delta t = 4A \cdot 1minute = 4A \cdot 60sec = 240_{\text{coulomb}}$