

Answer on Question #44268, Physics, Electric Circuits

a current of 4A flows through a 12V car head light bulb for 10min.how much energy transfer takes place during this time?

Solution

Energy is equal to power multiplied by time, $t=10 \text{ min} = 600 \text{ s}$.

$$E = P \cdot t$$

Hence

$$E = IUt = 4 \cdot 12 \cdot 600 = 28800 \text{ J}$$