Answer on Question #47817, Physics, Field Theory the electric potential difference between two points A and B IS 42v. what is the work done by an external agent in caring an charge of $q = 5.0 \cdot 10^{-5}$ from A to B at constant speed?

Solution

Work is equal to potential energy:

$$A = qU = 5.0 \cdot 10^{-5} \cdot 42 = 210 \cdot 10^{-5} J$$