Calculate the voltage of a battery that provides 70 joules of energy to every 15 coulombs of charge.

**Solution**

The work done by the battery electric field

$$W = QV.$$

Thus, the voltage

$$V = \frac{W}{Q} = \frac{70 \text{ J}}{15 \text{ C}} \approx 4.67 \text{ V}.$$

**Answer:** 4.67 V