$\mathcal{E}$ gained by proton w/ pd of 1V?

$E_{energy} = qV$

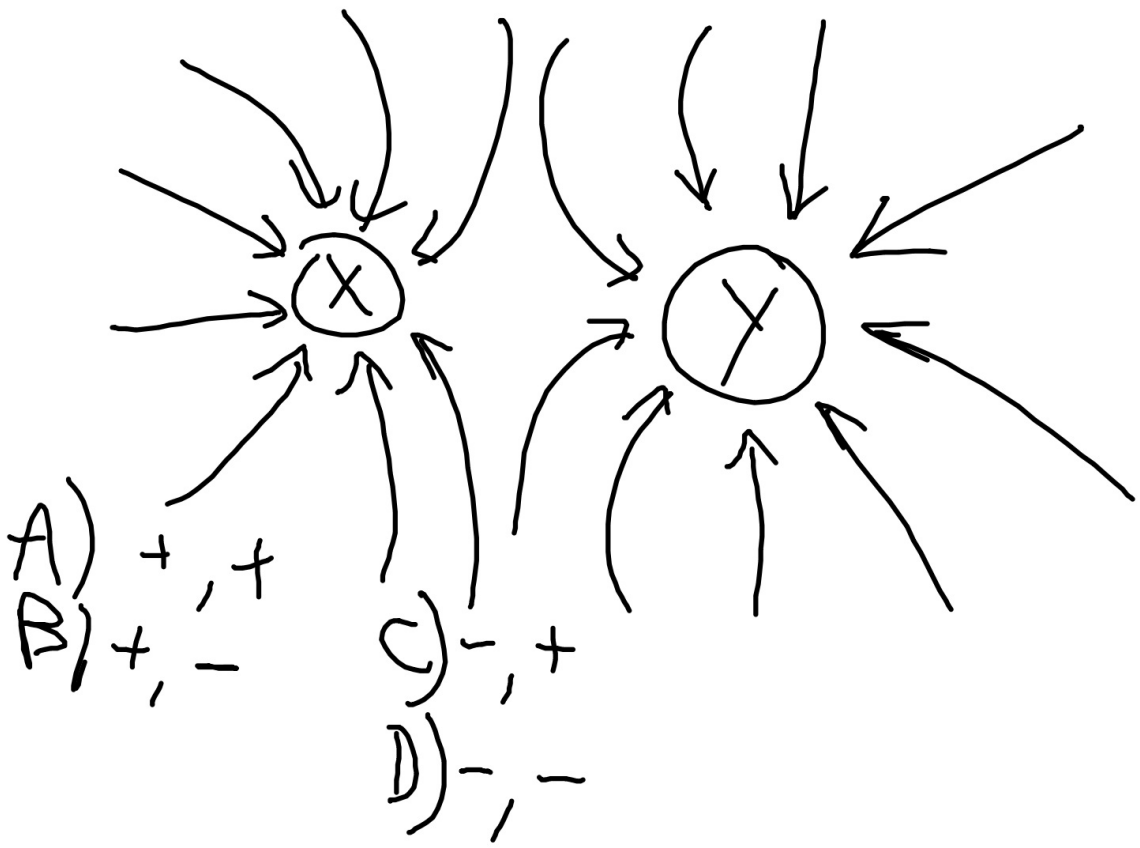
A) 1.0 J

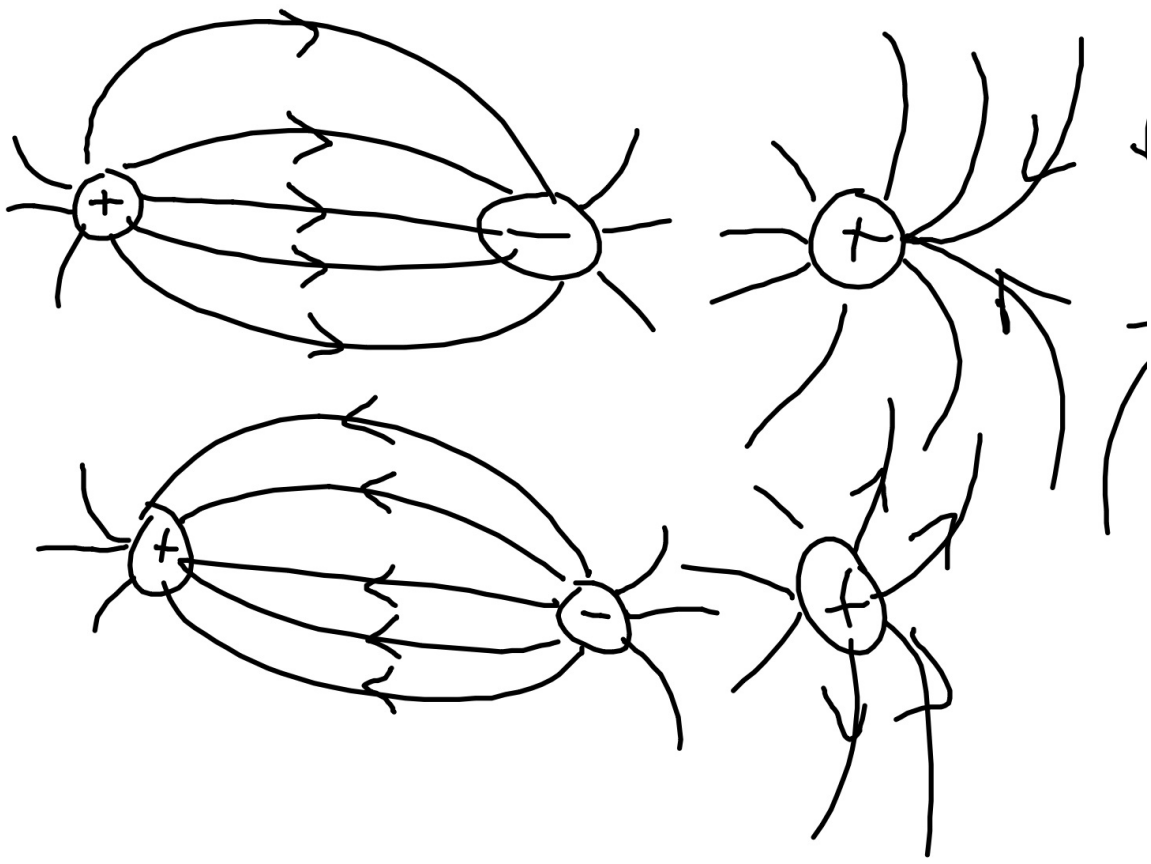
B) 1.0 eV

C) 6.3×10^{8} J

D) 1.6×10^{-19} eV

V


X
Y
A) +, +
B) +, −
C) −, +
D) −, −



An object with a charge of 2.00 C is separated from a second object with a the same charge by a distance of 1.50 m. What is the electric force between the charges? Is it attractive or repulsive?

$$F = \frac{k q^2}{r^2}$$

$1.6 \times 10^{10}\ N$

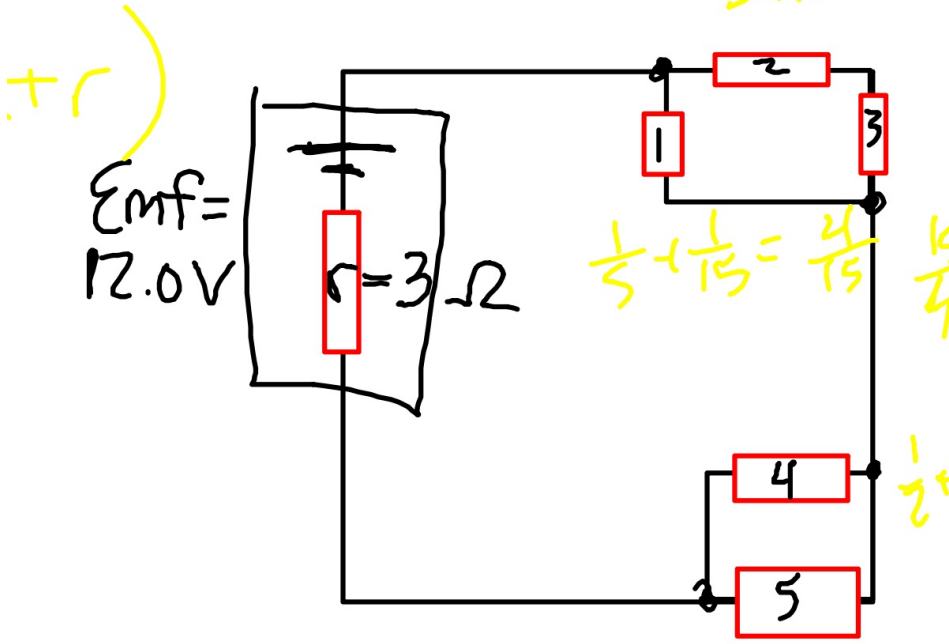
Calculate the strength and direction of the electri field 300 mm to the right of a -2.00 C electric charge.

$E = \frac{F}{q}$ $F = \frac{k q_1 q_2}{r^2}$

$2 \times 10^{11} \frac{N}{C}$ $E = \frac{kq}{r^2}$

Newton's Law of Universal Gravitation has a mathematical relationship similar to the one developed by:

A. Coulomb
B. Einstein
C. Lenz
D. Ohm



$5+10=15$

$\frac{1}{5}+\frac{1}{15}=\frac{4}{15}$

$\frac{15}{4}$

$\frac{1}{2}+\frac{1}{10}=\frac{6}{10}$

$R_1=R_2=$

$R_3=R_4=$

$R_5=2.$

$R_T=?$

$I_T=?$

$$I = \frac{\Delta q}{\Delta t}$$

$$F = \frac{k q_1 \cdot q_2}{r^2}$$

$$k = \frac{1}{4\pi\epsilon_0}$$

$$V = \frac{W}{q}$$

$$E = \frac{F}{q}$$

$$I = nAv_d q$$

$$\sum V = 0$$

$$\sum I = 0$$

$$R = \frac{V}{I}$$

$$P = VI = I^2 R$$

$$R_T = R_1 + R_2$$

$$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2}$$

$$\rho =$$

$$\mathcal{E} = I(R + r)$$

$$F = qvB\sin\theta$$

$$F = BIL\sin\theta$$