4> $V_{ba} = \frac{W_{ba}}{q}$

$109 - (-39) = \frac{W}{(1.602 \times 10^{-19})}$

$W = \_\_\_\_ J$

$1\ eV = 1.602 \times 10^{-19} J$

$[\ ]J \times \left[\frac{1\ eV}{J}\right] = \_\_\_\_ eV$

14> $W = KE + PE$

$PE = V_g$

6) $V = \frac{U}{q}$ → KE (J) → eV

8) $E = V/d$ ✓

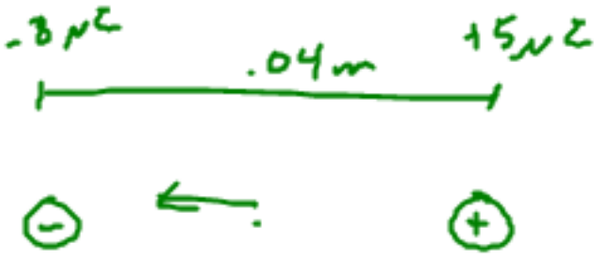
16B Prob 16

$2(E\cos\theta)$

$\tan\theta = 10/5$

$F = kQ/r^2$

16B - 10



$$E_T = E_- + E_+$$

$$= k\frac{q_-}{r_-^2} - k\frac{q_+}{r_+^2}$$

$$\Rightarrow E_T = k\left[\frac{(8\times10^{-9})}{(.02)^2} + \frac{(5\times10^{-9})}{(.02)^2}\right]$$