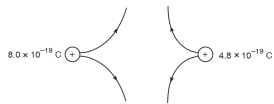


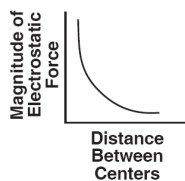
Answer Key

Electro Statics Pt 2

1.



2.



3.

$$F = \frac{kq_1q_2}{r^2}$$

$$F = \frac{(8.99 \times 10^9 \text{ N}\cdot\text{m}^2/\text{C}^2)(8.0 \times 10^{-19}\text{C})(4.8 \times 10^{-19} \text{ C})}{(1.2 \times 10^{-3} \text{ m})^2}$$

$$F = 2.4 \times 10^{-13} \text{ N}$$

4. $9.0 \times 10^{-1} \text{ N}$

5. $E = F_e/q$

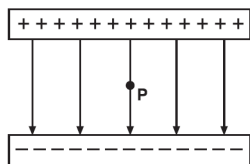
$$F_e = Eq$$

$$F_e = (2.0 \times 10 \text{ N/C})$$

$$(1.6 \times 10 \text{ C})$$

$$F_e = 3.2 \times 10 \text{ N}$$

6.



7.

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

$$W = qV$$

$$W = (1.60 \times 10^{19} \text{ C})(2.5 \times 10^4 \text{ V})$$

$$W = 4.0 \times 10^{-15} \text{ J}$$

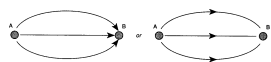
8. $4.80 \times 10^{-19} \text{ C}$ or

$$4.8 \times 10^{-19} \text{ C}.$$

9. $F = 2.1 \times 10^{-1} \text{ N}$

10.

Examples of Two-Credit Responses



Examples of One-Credit Responses

