



Clicker Question

What is the electric force on a 1 C charge when it is very far from other charges?

- A). It is not possible to tell
- B) It is infinitely large
- C) It is zero**
- D) None of these answers

$$F = \frac{kQ_1Q_2}{r^2} \quad k = 8.99E9 \text{ N} \cdot \text{m}^2 / \text{C}^2$$



Clicker Question

If we increase the distance between two charges by a factor of 2, what happens to the electric force between them?

- A). It increases by a factor of 2
- B) It increases by a factor of 4
- C) It decreases by a factor of 2
- D) It decreases by a factor of 4**
- E) It does not change

$$F = \frac{kQ_1Q_2}{r^2} \quad k = 8.99E9 \text{ N} \cdot \text{m}^2 / \text{C}^2$$



Clicker Question

- If I do 10 J of work on a baseball during the process of throwing it, neglecting air resistance, how much does the kinetic energy of the ball increase?
A) 280 J
B) 10 J
C) 0 J
D) 1.172×10^{11} J



Clicker Question

How many Joules of energy are in a 280 Calorie Snickers bar?

DATA: 1 Calorie = 1 kcal = 4184 J

A) 280 J

B) 4184 J = 4.184 kJ

C) 1.172×10^6 J = 1.172 MJ

D) 1.172 J