

Hi, everybody. Happy Labor Day.

Here comes our first home work.

1. Two positively charged particles fixed in place on an x axis. The charge are $q_1=1.60 \times 10^{19} \text{C}$ and $q_2=3.20 \times 10^{19} \text{C}$. The particles are separated by $R=0.0200 \text{m}$. What are the magnitude and direction of the electrostatic force F_{12} on particle 1 from particle 2.

2. In the problem above, a particle c with a charge $q_3 = -3.20 \times 10^{19} \text{C}$ lies on the x axis between particle 1 and 2. It is $0.75R$ from particle 1. What is the electrostatic force F on particle 1 due to particle 2 and 3?