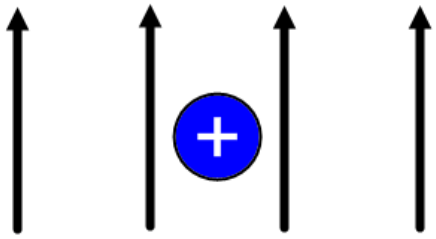
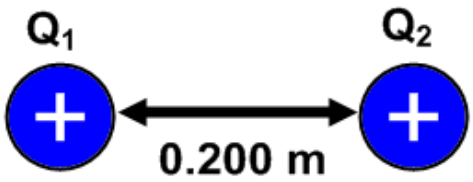
Name: _____

1. A positive 4.0×10^{-6} C charge is in a region where the electric field is 3.0×10^{7} N/C in the upward direction. What is the magnitude and direction of the force on the positive charge?



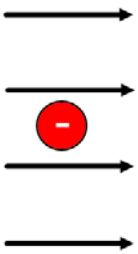
2. Two positive masses are positioned 0.200-m apart as shown below. Q_1 has a magnitude of 8.0×10^{-6} C and Q_2 has a magnitude of 3.0×10^{-6} C.



a) Do these two masses attract each other or repel each other?

b) How much force is felt by each mass?

3. A negative charge with a magnitude of 2.0×10^{-6} C is located in a region where the electric field has a strength of 4.0×10^{7} N/C and is directed to the right as shown.



a. Which direction will the charge be pushed when it is released?

b. What is the magnitude of the force that the negative charge will feel?