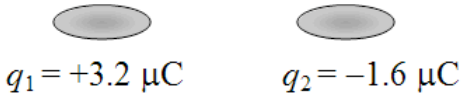
Physics 2102 Section 6 Christian Buth

Activity 1, January 14, 2009

Consider the two charges shown in the drawing. Which of the following statements correctly describes the direction of the electric force acting on the two charges?



a) The force on q_1 points to the left and the force on q_2 points to the left.
b) The force on q_1 points to the right and the force on q_2 points to the left.
c) The force on q_1 points to the left and the force on q_2 points to the right.
d) The force on q_1 points to the right and the force on q_2 points to the right.

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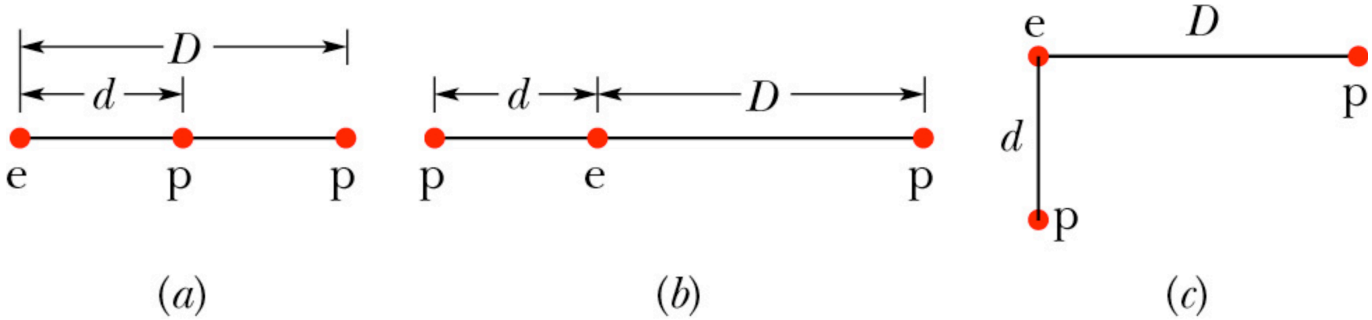
a) The force on q_1 has a magnitude that is twice that of the force on q_2.
b) The force on q_2 has a magnitude that is twice that of the force on q_1.
c) The force on q_1 has the same magnitude as that of the force on q_2.
d) The force on q_2 has a magnitude that is four times that of the force on q_1.
e) The force on q_1 has a magnitude that is four times that of the force on q_2.

Activity 2, January 14, 2009

The figure shows three point charges arranged in different ways. The charges all have the same magnitudes, but different signs as shown in the figure.



Rank the arrangements according to the magnitude of the total electrostatic force on the **electron**, due to the protons, greatest first.