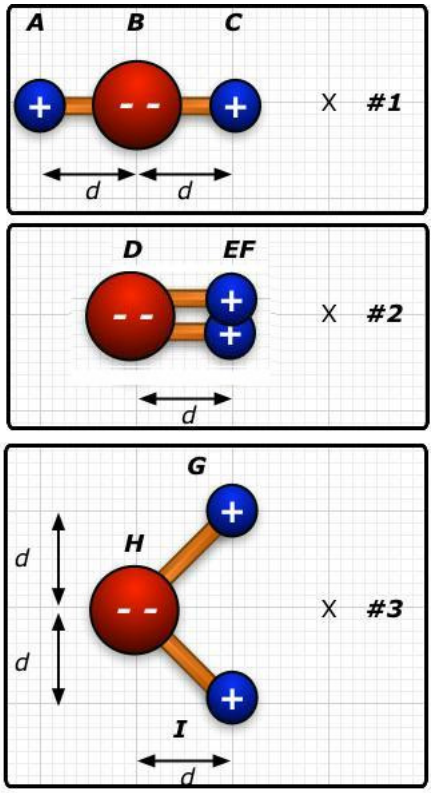
In the figure at the right are shown three molecules, each consisting of two positive ions of charge +e and a negative ion of charge -2e. The distance scale is given by the grid, each box having a height and width equal to *d*.



Answer each of the three questions below by choosing a symbol for the appropriate direction: points to the left (←),points to the right (→), points up (↑), or points down (↓), or is zero (0).

a) The direction of the net electrical force of the molecule on a positive charge placed at the x in situation #1.

b) The direction of the net electrical force of the molecule on a positive charge placed at the x in situation #2.

c) The direction of the net electrical force of the molecule on a positive charge placed at the x in situation #3.

Complete each of the two sentences below by choosing a symbol for the appropriate relation: is greater than (>), is equal to (=), is less than (<), or cannot be determined (?).

d) In situation #1, the magnitude of the force on a positive test charge at the x from the negative ion B is ___ the magnitude of the force on that test charge from the positive ion C.

e) In situation #3, the magnitude of the force on a positive test charge at the x from the two positive ions G and I is ___ the magnitude of the force on a positive test charge at the x from the two positive ions E and F in situation #2.