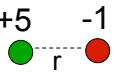
How much time *outside class* do you anticipate you'll be spending on Phys 2020 this semester?

A: 0-4 hrs/week
B: 4-8 hrs/week
C: 8-12 hrs/week
D: more than 12 hours/week

2 identical charged metal balls have charges +5 mC and -1 mC



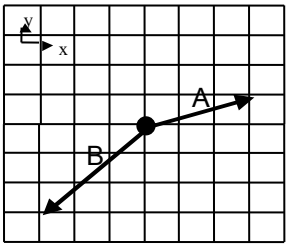
They **each** feel a force of magnitude F

Now bring them together so they *touch,* then move 'em back to their original positions.
What is the charge on each one now?

A: Same as before.
B: They swap: the first becomes -1 mC , the 2nd becomes +5 mC
C: +3 mC on each.
D: +2 mC on each.
E: Not sure/not enough information

Two vectors **A** and **B** are shown. Consider the vector sum **C** = **A**+**B**.

What is Cy, the y-component of **C**?



A: 3 B: 2 C: -2 D: -4
E: None of these/not sure

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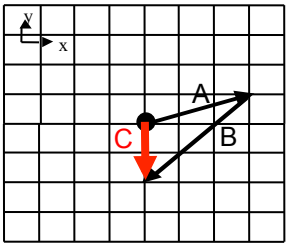
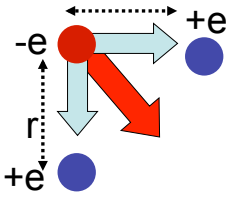


A: 3 B: 2 C: -2 D: -4
E: None of these/not sure

What is the magnitude of the NET force on the electron?



A) $|\vec{F}| = k\frac{e^2}{r^2}$

B) $|\vec{F}| = 2k\frac{e^2}{r^2}$

C) $|\vec{F}| = \sqrt{2}k\frac{e^2}{r^2}$

D) Something else

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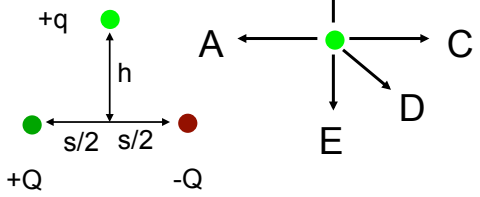
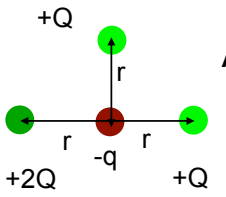
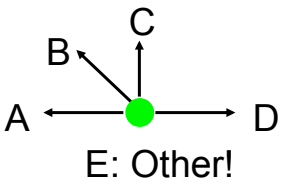
Consider the charge configuration shown below left. What is the direction of the net force on the +q charge?



Consider the charge configuration shown below left. What is the direction of the net force on the -q charge?

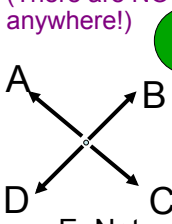




E: Other!

Which is the correct direction of the electric field created by charge +Q at the location shown (below and left of the charge)?

(There are NO CHARGES except +Q, anywhere!)



E-field points in direction that positive test charge would move.

E: Not well defined!...