Object A, which has been charged to +13.0 nC, is at the origin. Object B, which as been charged

to – 27.5 nC, is at (x,y) = (0.0 cm, 2.00 cm).

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| --- | --- |
| Part A |  |
| What is the *x*-component of the force (\vec{F}_{\rm A \; on \; B})_{\rm x}on B due to A?  **Express your answer numerically, in newtons, to three significant figures.**   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | ANSWER: | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | (\vec{F}_{\rm A \; on \; B})_{\rm x} = |  | N |  | | | |
| Part B |  |
| What is the *y*-component of the force (\vec{F}_{\rm A \; on \; B})_{\rm y}on B due to A?  **Express your answer numerically, in newtons, to three significant figures.**   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | ANSWER: | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | (\vec{F}_{\rm A \; on \; B})_{\rm y} = |  | N |  | | | |

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| Part C |  |
| What is the *x*-component of the force (\vec{F}_{\rm B \; on \; A})_{\rm x}on A due to B?  **Express your answer numerically, in newtons, to three significant figures.**   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | ANSWER: | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | (\vec{F}_{\rm B \; on \; A})_{\rm x} = |  | N |  | | | |
| Part D |  |
| What is the *y*-component of the force (\vec{F}_{\rm B \; on \; A})_{\rm y}on A due to B?  **Express your answer numerically, in newtons, to three significant figures.**   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | ANSWER: | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | (\vec{F}_{\rm B \; on \; A})_{\rm y} = |  | N |  | | | |