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).

|  |  |
| --- | --- |
| 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 |  |

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