**Each grid line is a meter. Charge A is -14.7 x 10-6 C, and charge B is +17.2 x 10-6 C. Find the electric field at the origin. Draw the vector as an arrow with its tail on the origin, and label the angle you calculated. Carry at least 4 sig figs for your calculations.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | **y** |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | **A** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | **x** |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **B** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **magnitude** | **trig. angle (opt)** | **x** | **y** |
| EA |  |  |  |  |
| EB |  |  |  |  |
|  |  | EA + EB |  |  |
|  |  |  | Magnitude | Trig Angle |
|  |  |  |  |  |

Mag 16,715 N/C

angle 68.5º (trig angle)