|  |  |
| --- | --- |
| **Fill in the Blanks** | **Vector Magnitude and Direction** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column Vector** | **Component Form** | **Sketch** | **Magnitude** | **Angle made with** $+i$ |
| $$\left(\begin{matrix}3\\4\end{matrix}\right)$$ | $$3i+4j$$ |  |  |  |
|  | $$-12i+5j$$ |  |  |  |
| $$\left(\begin{matrix}4\\-4\end{matrix}\right)$$ |  |  |  |  |
|  | $$-2\sqrt{5}i-4j$$ |  |  |  |
|  |  |  |  |  |
|  |  |  | $$12$$ |  |
|  |  |  | $$\sqrt{10}$$ | $$135°$$ |
| $$\left(\begin{matrix}-4\\-4\sqrt{2}\end{matrix}\right)$$ |  |  |  |  |
|  | $$10i- j$$ |  | $$2\sqrt{29}$$ |  |
| $$\left(\begin{matrix}-8a\\ \end{matrix}\right)$$ |  |  | $$10a$$ |  |