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| **Magnitude of a Vector** |
| **(a)** | **(b)** | **(c)** |
| Find the magnitude of vector $a $to 1 decimal place. | Find the magnitude of vector $b$, leaving your answer as a surd. | $c=\left(\begin{matrix}5\\1\end{matrix}\right)$. Draw the vector $c$ and find its magnitude to 1 decimal place. |
| **(d)** | **(e)** | **(f)** |
| $d=\left(\begin{matrix}-4\\5\end{matrix}\right)$. Draw the vector $d$ and find its magnitude, leaving your answer in surd form. | Find the magnitude of the vector $\left(\begin{matrix}8\\-6\end{matrix}\right)$ | Find the magnitude of the vector $\left(\begin{matrix}-7\\2.5\end{matrix}\right)$, giving your answer to 1 decimal place. |
| **(g)** | **(h)** | **(i)** | **(j)** |
| Find the magnitude of the vector $\left(\begin{matrix}5\\\sqrt{3}\end{matrix}\right)$, giving your answer as a simplified surd. | $$a=\left(\begin{matrix}6\\-2\end{matrix}\right) b=\left(\begin{matrix}-1\\14\end{matrix}\right)$$Find the magnitude of the vector $a+b$. | $$a=\left(\begin{matrix}-3\\5\end{matrix}\right) b=\left(\begin{matrix}-1\\-2\end{matrix}\right)$$Find the magnitude of the vector $a-3b$. | Find as many vectors as you can with the same magnitude as the vector $\left(\begin{matrix}2\\-1\end{matrix}\right)$. |