17	$(\overrightarrow{HF} =)\begin{pmatrix}4\\14\end{pmatrix}+\begin{pmatrix}5\\-2\end{pmatrix}\left[=\begin{pmatrix}9\\12\end{pmatrix}\right]$ or $\begin{pmatrix}4\\14\end{pmatrix}-\begin{pmatrix}-5\\2\end{pmatrix}\left[=\begin{pmatrix}9\\12\end{pmatrix}\right]$ oe $(\overrightarrow{FH} =)\begin{pmatrix}-5\\2\end{pmatrix}+\begin{pmatrix}-4\\-14\end{pmatrix}\left[=\begin{pmatrix}-9\\-12\end{pmatrix}\right]$ or $\begin{pmatrix}-5\\2\end{pmatrix}-\begin{pmatrix}4\\14\end{pmatrix}\left[=\begin{pmatrix}-9\\-12\end{pmatrix}\right]$ oe		3	M1	a correct calculation for $\overrightarrow{HF}$ or $\overrightarrow{FH}$ (for this mark allow written as coordinates) Also allow eg 9**i** + 12**j**
	$\sqrt{"9"^2+"12"^2}$ or $\sqrt{("-9")^2+("-12")^2}$ Allow a complete method using their values for $\overrightarrow{HF}$ or $\overrightarrow{FH}$ Provided it is from $\begin{pmatrix}\pm4\\\pm14\end{pmatrix}-\begin{pmatrix}\pm5\\\pm2\end{pmatrix}$			M1indep	Allow their $\overrightarrow{HF}$ or $\overrightarrow{FH}$ provided it is from $\begin{pmatrix}\pm4\\\pm14\end{pmatrix}-\begin{pmatrix}\pm5\\\pm2\end{pmatrix}$ allowing any sign error if used $(-9)^2$ and $(-12)^2$ condone missing brackets if recovered
	Correct answer scores full marks (unless from obvious incorrect working) Watch out for a correct answer from wrong working eg –5 + 2 + 4 + 14 = 15	15		A1	from fully correct figures eg use of $\begin{pmatrix}9\\-12\end{pmatrix}$ would give the correct answer but would **not** gain this accuracy mark
					Total 3 marks