Question	Answer	Mark	Mark scheme	Additional guidance
19	$\frac{5}{2}\mathbf{a}-\frac{9}{2}\mathbf{b}$	P1	for process to find a relevant missing vector, eg $\overrightarrow{EC}=\mathbf{b}-\mathbf{a}$ **or** $\overrightarrow{CE}=\mathbf{a}-\mathbf{b}$ **or** $\overrightarrow{QC}=-2\mathbf{b}$ **or** $\overrightarrow{CQ}=2\mathbf{b}$ **or** $\overrightarrow{QA}=-3\mathbf{b}$ **or** $\overrightarrow{AQ}=3\mathbf{b}$	All vectors must be clearly assigned
		P1	for process to find $\overrightarrow{CB}$ **or** $\overrightarrow{AB}$ **or** $\overrightarrow{EB}$ eg $\overrightarrow{CB}=\frac{5}{2}"(\mathbf{a}-\mathbf{b})"$ **or** $\overrightarrow{AB}=\mathbf{b}+\frac{5}{2}"(\mathbf{a}-\mathbf{b})"\left(=\frac{5}{2}\mathbf{a}+\frac{3}{2}\mathbf{b}\right)$ **or** $\overrightarrow{AB}=\mathbf{a}+\frac{3}{2}"(\mathbf{a}-\mathbf{b})"\left(=\frac{5}{2}\mathbf{a}+\frac{3}{2}\mathbf{b}\right)$ **or** $\overrightarrow{EB}=\frac{3}{2}"(\mathbf{a}-\mathbf{b})$	
		P1	for complete process to find $\overrightarrow{QB}$ in terms of **a** and **b**, eg $\overrightarrow{QB}="-2\mathbf{b}"+"\frac{5}{2}(\mathbf{a}-\mathbf{b})"$ **or** $\overrightarrow{QB}="-3\mathbf{b}"+"\left(\mathbf{b}+\frac{5}{2}(\mathbf{a}-\mathbf{b})\right)"$ **or** $\overrightarrow{QB}="-3\mathbf{b}"+"\left(\mathbf{a}+\frac{3}{2}(\mathbf{a}-\mathbf{b})\right)"$ **or** $\overrightarrow{QB}=-3\mathbf{b}+\mathbf{a}+"\left(\frac{3}{2}(\mathbf{a}-\mathbf{b})\right)"$	
		A1	for $\frac{5}{2}\mathbf{a}-\frac{9}{2}\mathbf{b}$ oe eg, $\frac{1}{2}(5\mathbf{a}-9\mathbf{b})$ **or** $2.5\mathbf{a}-4.5\mathbf{b}$	