6(a)	$\dfrac{1}{\sqrt{1^2+3^2+2^2}}=\dfrac{1}{\sqrt{14}}$
6(b)	$\begin{vmatrix} \mathbf{i} & \mathbf{j} & \mathbf{k} \\ 0 & -1 & 2 \\ 2 & 0 & -1 \end{vmatrix}=\begin{pmatrix}1\\4\\2\end{pmatrix}$
	$\begin{pmatrix}1\\4\\2\end{pmatrix}\bullet\begin{pmatrix}1\\3\\2\end{pmatrix}=\sqrt{21}\sqrt{14}\cos\alpha \Rightarrow \cos\alpha=\dfrac{17}{\sqrt{21}\sqrt{14}}$
	$7.5°$

6(c)	$\overrightarrow{OP} = \lambda\begin{pmatrix}2\\-1\\-1\end{pmatrix}, \overrightarrow{OQ} = \begin{pmatrix}2\mu\\-1+\mu\\2-3\mu\end{pmatrix} \Rightarrow \overrightarrow{PQ} = \begin{pmatrix}2\mu-2\lambda\\-1+\mu+\lambda\\2-3\mu+\lambda\end{pmatrix}$
	$\begin{pmatrix}2\mu-2\lambda\\-1+\mu+\lambda\\2-3\mu+\lambda\end{pmatrix}\bullet\begin{pmatrix}2\\-1\\-1\end{pmatrix} = 0$
	$6\mu - 6\lambda = 1$
	$\begin{pmatrix}2\mu-2\lambda\\-1+\mu+\lambda\\2-3\mu+\lambda\end{pmatrix}\bullet\begin{pmatrix}2\\1\\-3\end{pmatrix} = 0 \Rightarrow 14\mu - 6\lambda = 7$
	$\mu = \dfrac{3}{4} \Rightarrow \overrightarrow{OQ} = \begin{pmatrix}\frac{3}{2}\\-\frac{1}{4}\\-\frac{1}{4}\end{pmatrix} = \frac{1}{4}\begin{pmatrix}6\\-1\\-1\end{pmatrix}.$
	$\mathbf{r} = \frac{1}{4}\begin{pmatrix}6\\-1\\-1\end{pmatrix} + k\begin{pmatrix}1\\1\\1\end{pmatrix}$