4	Referred to a fixed origin O , the position vectors of the points P and Q are $(3\mathbf{i} + 6\mathbf{j})$ and $(4\mathbf{i} - 2\mathbf{j})$ respectively.	
	(a) Find, as a simplified expression in terms of i and j , \overrightarrow{PQ} .	(2)
	(b) Find a unit vector which is parallel to \overrightarrow{PQ} .	(2)
	(c) Show that \overrightarrow{OP} is perpendicular to \overrightarrow{OQ} .	(4)

Question 4 continued		
	(Total for Question 4 is 8 marks)	

