(c) Given the vector equation $p\begin{pmatrix}2\\1\end{pmatrix}+q\begin{pmatrix}2\\4\end{pmatrix}=5\begin{pmatrix}-p+1\\p+q\end{pmatrix}$, find the values of p and q. [3]

6 A group of 15 people includes 3 brothers. A team of 6 people is to be chosen from this group. The three brothers must not be separated. Find the number of possible teams that can be chosen. [3]