1. Is the vectors {7,8,1} in the span of the vectors {1,2,3} and {3,4,5}? Show your work and clearly state why?

2. Are the vectors {1,2,3} and {3,4,5} LI or LD? Clearly explain why?

3. Explain using standard terminology how you would determine if a set of 5 vectors {a1, a2, a3, a4, a5} in $\mathbb{R}^6$ were Linearly Independent.