A dynamical CTLTI system is characterized by $A = \begin{bmatrix} 1 & 3 \\ 3 & 1 \end{bmatrix}$, $C = [0.5 \ 1]$. 

1. Find a linear state-observer gain $L = [l_1 \ l_2]^T$ such that the poles of the estimation error are $-5$ and $-7$.

2. Can you place both poles at $-6$? If yes, what is the corresponding observer gain?