

Name:

1. Find matrices  $S$  and  $J$  such that  $J$  is in Jordan canonical form and  $A = SJS^{-1}$ .

$$A = \begin{pmatrix} 3 & 1 \\ -1 & 3 \end{pmatrix}$$

2. Find matrices  $S$  and  $J$  such that  $J$  is in Jordan canonical form and  $A = SJS^{-1}$ .

$$A = \begin{pmatrix} 3 & 0 \\ -1 & 3 \end{pmatrix}$$