

1. Read about the QR factorization in Section 5.3 of your text.

2. Find the QR factorization of  $\begin{bmatrix} 1 & 3 & 0 \\ 2 & 4 & 1 \\ -1 & -1 & 0 \\ 0 & 1 & 1 \end{bmatrix}$

3. Let  $A$  be a square matrix with  $QR$  factorization  $A = QR$ . Prove that  $A$  is similar to  $RQ$ .