

Name:

1. Find an orthogonal matrix Q and an upper triangular matrix R such that $A = QR$.

$$A = \begin{pmatrix} 3 & 1 \\ 4 & 0 \end{pmatrix}$$

2. Compute the best fit line through the points $(0, -1)$, $(1, 0)$, and $(3, 4)$ in the least-squares sense.