

WORKSHEET 10/20/22
MATH 2331, FALL 2022

- (1) Let L be the line parallel to $\vec{v}_1 = (3, 4, 0)$. Find an orthonormal basis for L .
- (2) Let V the plane spanned by $\vec{v}_1 = (3, 4, 0)$ and $\vec{v}_2 = (1, 0, 0)$. Extend the basis you found in #1 to an orthonormal basis for V .
- (3) Find the QR factorization of the matrix

$$M = \begin{bmatrix} 2 & 2 \\ 1 & 7 \\ -2 & -8 \end{bmatrix}.$$