

CPSC 314 Worksheet 2 Composition of Transformation Matrices

Given the following transformation matrix:

Name:
Student #:

$$M_{\text{model}} = \begin{bmatrix} 1 & -1 & 0 & 1 \\ 1 & 1 & 0 & -2 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} \quad \text{where} \quad P_{\text{wcs}} = M_{\text{model}} P_{\text{obj}}$$

- Sketch the origin and basis vectors of F_{obj} .
- Draw the transformed house, which is drawn below in its untransformed state.
- Give a sequence of `translate()`, `rotate()`, and `scale()` transformations that would yield the same final transformation.

