A zero row of a matrix is a row that only contains zeros. A nonzero row of a matrix is a row that contains at least one nonzero entry.

Reduced row echelon form of a matrix is a matrix in which:

- All the zero rows are at the bottom of the matrix.
- The first nonentry of each nonzero row is 1. We call this entry the *pivot* 1.
- The pivot 1 of each row is on the right of the pivot 1 of the row above it.
- Each column that contains the pivot 1 has only one nonzero entry, which is the pivot 1 itself.

Examples of reduced row echelon form (RREF).

Practice reducing a matrix into a RREF. See the worksheet.

Augmented matrix of a linear system of equations: row operations transform a linear system into an equivalent linear system. The simplest equivalence of a linear system is the linear system corresponding to the RREF of the augmented matrix.