Ch 1.2 Gaussian Elimination (K)

Reduced row echelon form (rref)

1. If there are any rows containing only zero entries, then they are located in the bottom part of the matrix
2. If the row contains non-zero entries, then the first non-zero entry is a 1 (leading 1)
3. The leading 1's of the two consecutive non-zero rows go strictly from top left to bottom right of the matrix
4. The only non-zero entry in a column containing a leading 1 is the leading 1

▼ Example 1.9

$$\left[\begin{array}{ccc|c} 1 & 5 & -3 & -9 \\ 0 & -13 & 5 & 37 \\ 0 & 0 & 5 & -15 \end{array}\right] \text{ into something like } \left[\begin{array}{ccc|c} 1 & 0 & 0 & * \\ 0 & 1 & 0 & * \\ 0 & 0 & 1 & * \end{array}\right] \Rightarrow \left[\begin{array}{ccc|c} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & -4 \\ 0 & 0 & 1 & -3 \end{array}\right]$$