Row Reduction

(Row) Echelon Form

Leading Entry:

Three Properties of Echelon Form:

(1)

(2)

(3)

Two Additional Properties for *Reduced* Echelon Form

(1)

(2)

The result is called an <u>echelon matrix</u>, or respectively, a <u>reduced echelon matrix</u>

Theorem 1: Uniqueness of the Reduced Row Echelon Form

Consequence of Theorem 1:
If matrix A is row equivalent to an **echelon matrix** U, then

Pivot Positions

Definition:

Pivot Column:

Pivot:

Example (maybe)