

HW DUE WEDNESDAY 9/15

MATH 309, SECTION 3

- (1) If the matrix N is obtained from M by the ERO $cR_i + R_j \rightarrow R_j$, then the solutions sets satisfy $S_M \subset S_N$.
- (2) Show that the row operation $cR_i + dR_j \rightarrow R_j$, where $c, d \neq 0$, can be obtained by performing 2 EROs.
- (3) 2.2: 1, 3
- (4) (BONUS) Show that there is no sequence of EROs which always produces the (illegal) row operation $R_i \rightarrow 0$, where all numbers in a row are set to 0.