

Linear Combo Calculations (continued)

Example (continued):

$$\left[\begin{array}{cc|c} 2 & 0 & 8 \\ 1 & 1 & 11 \end{array} \right] \xrightarrow{\text{G-E}} \left[\begin{array}{cc|c} 2 & 0 & 8 \\ 0 & 1 & 7 \end{array} \right] \implies x = 4, y = 7$$

$$\text{and therefore } 4 \begin{bmatrix} 2 \\ 1 \end{bmatrix} + 7 \begin{bmatrix} 0 \\ 1 \end{bmatrix} = \begin{bmatrix} 8 \\ 11 \end{bmatrix}$$

Geometrically we have

