## **Elementary Row Operations**

```
scaling multiply a row by a number
```

interchange switch two rows

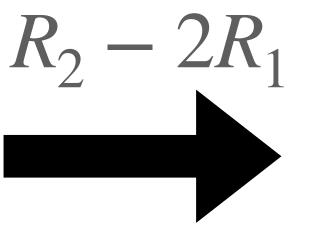
replacement add two rows (and replace one

with the sum)

rep. + scl. add a scaled equation to another

## Example: Row Reductions

$$\begin{bmatrix} 2 & 3 & -6 \\ 4 & -5 & 10 \end{bmatrix}$$



$$\begin{bmatrix} 2 & 3 & -6 \\ 4 & -5 & 10 \end{bmatrix} \qquad \begin{array}{c} R_2 - 2R_1 \\ \hline 0 & -11 & 22 \end{bmatrix}$$