Theorem 2.3

The solution set of $A\vec{x} = \vec{b}$ is given by

$$\vec{y} = \vec{p} + \vec{x}_h$$

- $\vec{p}$ is a (guessed) solution of $A\vec{x} = \vec{b}$
- $\vec{x}_h$ is any solution of $A\vec{x} = \vec{0}$