

2

10

3. Solve  $Ax = b$  for

$$\begin{bmatrix} 1 & 2 & 3 & 0 & 4 & 5 & 0 \\ 0 & 0 & 0 & 1 & 6 & 7 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \text{ and } b = \begin{bmatrix} 8 \\ 9 \\ 10 \end{bmatrix}$$

$$x_1 = 8 - 2x_2 - 3x_3 - 4x_5 - 5x_6$$

$$x_2 = x_2$$

$$x_3 = x_3$$

$$x_4 = 9 - 6x_5 - 7x_6$$

$$x_5 = x_5$$

$$x_6 = x_6$$

$$x_7 = 10$$

4. Solve  $Ax = b$  for

$$\begin{bmatrix} 1 & 2 & 3 & 0 & 4 & 5 & 0 \\ 0 & 0 & 0 & 1 & 6 & 7 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \text{ and } b = \begin{bmatrix} 8 \\ 9 \\ 10 \end{bmatrix}$$

No solution