

Week 05 Participation Assignment (2 of 2)

Corey Mostero

17 March 2023

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1 Part 2

1.1 1

$$A = \begin{bmatrix} 3 & 1 & 1 \\ 5 & 1 & 2 \\ -2 & 4 & -3 \end{bmatrix}$$

$$[A|\vec{b}] = \left[\begin{array}{ccc|c} 3 & 1 & 1 & 3 \\ 5 & 1 & 2 & 4 \\ -2 & 4 & -3 & 5 \end{array} \right]$$

1.2 2

$$A = \begin{bmatrix} 4 & 2 & -3 & -14 \\ 3 & 0 & 4 & 22 \\ -3 & 1 & -2 & -19 \\ 1 & -1 & -4 & -9 \end{bmatrix}$$

$$[A|\vec{b}] = \left[\begin{array}{cccc|c} 4 & 2 & -3 & -14 & -7 \\ 3 & 0 & 4 & 22 & 29 \\ -3 & 1 & -2 & -19 & -21 \\ 1 & -1 & -4 & -9 & -15 \end{array} \right]$$

1.3 3

$$A = \begin{bmatrix} 5 & 6 & -22 & -27 & 0 \\ -1 & -3 & 17 & 0 & 9 \\ 7 & 4 & 0 & -51 & 22 \end{bmatrix}$$

$$[A|\vec{b}] = \left[\begin{array}{ccccc|c} 5 & 6 & -22 & -27 & 0 & -3 \\ -1 & -3 & 17 & 0 & 9 & -3 \\ 7 & 4 & 0 & -51 & 22 & -13 \end{array} \right]$$

1.4 4

$$A = \begin{bmatrix} 9 & 3 & 36 & 7 & -2 & 31 \\ 7 & 4 & 23 & 2 & -5 & 31 \\ -2 & 4 & -22 & 10 & -5 & 72 \\ 5 & 2 & 10 & -7 & -2 & -21 \\ 3 & 6 & -3 & -2 & -5 & 19 \end{bmatrix}$$

$$[A|\vec{b}] = \begin{bmatrix} 9 & 3 & 36 & 7 & -2 & 31 & | & 23 \\ 7 & 4 & 23 & 2 & -5 & 31 & | & 14 \\ -2 & 4 & -22 & 10 & -5 & 72 & | & -29 \\ 5 & 2 & 10 & -7 & -2 & -21 & | & 31 \\ 3 & 6 & -3 & -2 & -5 & 19 & | & 26 \end{bmatrix}$$