

# Quiz #4

Please print your name:

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**Problem 1.** Let  $A = \begin{bmatrix} 1 & -2 & 0 & 2 & 3 \\ 1 & -2 & 1 & 0 & 0 \\ 2 & -4 & 0 & 4 & 6 \\ 1 & -2 & 1 & 0 & 0 \end{bmatrix}$ . Find a basis for each of  $\text{col}(A)$ ,  $\text{row}(A)$  and  $\text{null}(A)$ .

|                             |                             |                              |
|-----------------------------|-----------------------------|------------------------------|
| basis for $\text{col}(A)$ : | basis for $\text{row}(A)$ : | basis for $\text{null}(A)$ : |
|-----------------------------|-----------------------------|------------------------------|