

Name: _____
Student ID #: _____

Mini-Quiz # 2
MAT-022A-Summer Session II (8/5/09)

You have 10 minutes. You may only use a pencil (or pen) and scrap paper. No calculators, notes or books.

1.

- (a) Give a definition of a linear combination of the vectors $\begin{bmatrix} 1 \\ 3 \\ 1 \end{bmatrix}$ and $\begin{bmatrix} 0 \\ -2 \\ 5 \end{bmatrix}$. (Use words not just symbols. 4 points.)

- (b) Is the vector $\begin{bmatrix} 2 \\ 1 \\ 1 \end{bmatrix}$ a linear combo of the vectors $\begin{bmatrix} 0 \\ 1 \\ 1 \end{bmatrix}$ and $\begin{bmatrix} 1 \\ 1 \\ 0 \end{bmatrix}$? (You must give a careful justification of your answer to receive credit. Explain with words. You might want to use the reverse side. 6 points.)