

Name: _____
Student ID #: _____

Mini-Quiz # 10
MAT-022A-Summer Session II (8/28/09)

You have until Friday 9/4/09 by class time. Please turn in the quiz by then. You may only use a pencil (or pen) and scrap paper. Be sure to show all your work carefully. Answers with no work will not receive credit.

1. Consider the matrix $A = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 6 & 7 & 8 & 9 & 10 \\ 11 & 12 & 13 & 14 & 15 \end{bmatrix}$

(a) Find a basis for the column space of A (2.5 points).

(b) Find a basis for the row space of A (2.5 points).

2. Find an orthonormal basis for the nullspace of $B = \begin{bmatrix} 1 & 1 & -2 & 0 & -2 \\ 0 & 1 & -1 & 0 & -1 \\ 2 & 0 & -2 & 0 & -2 \end{bmatrix}$ (5 points).