

QUIZ #6, 9/13/07

MATH 54, FALL 2007

Show your work and justify your answers! Feel free to use both sides.

Name:

1. (4 pts) Find the inverse to $\begin{bmatrix} 1 & 1 & 0 \\ 0 & 1 & 1 \\ 3 & 3 & 3 \end{bmatrix}$

2. (2 pts each) True or False? Briefly explain your answers.

(a) The only non-invertible 2×2 matrix is the matrix $\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$.

(b) If A is invertible, then $A\vec{x} = \vec{b}$ always has a unique solution.

(c) If $A\vec{x} = \vec{b}$ is inconsistent, then A has more rows than columns.