

You have 20 minutes to complete this quiz. To receive full credit, you must justify your answers.

Name : _____

1. (5 points) Find the inverse of the following matrix.

$$\begin{bmatrix} 7 & 2 & 1 \\ 0 & 3 & -1 \\ -3 & 4 & -2 \end{bmatrix}$$

2. (5 points) Let A be an invertible $n \times n$ matrix. Show that the linear transformation $A : \mathbb{R}^n \rightarrow \mathbb{R}^n$ is one-to-one and onto.