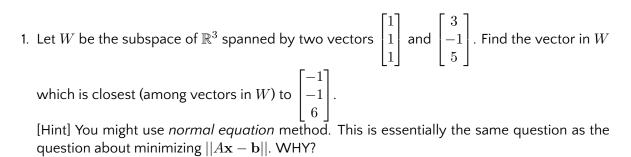
Quiz 10

Name :

SID :

CAUTION. As you may know, questions are just the same as Sample Quiz. To make any "distribution" of scores, I will be grading more carefully. *Minor mistakes can cause much deduction of points.* So, please read each questions carefully and figure out what they want.



Math 54

2. Let *H* be the subspace of
$$\mathbb{R}^4$$
 spanned by $\begin{bmatrix} 1\\0\\1\\1 \end{bmatrix}$, $\begin{bmatrix} 6\\1\\-2\\5 \end{bmatrix}$, $\begin{bmatrix} 0\\8\\2\\1 \end{bmatrix}$. Find an orthogonal basis for *H*.