Math 2263 Multivariable Calculus
Quiz 1: 12.4-12.5

Name: June 16, 2011

1. (a) Find two unit vectors orthogonal to both $\langle 0, 1, 2 \rangle$ and $\langle 1, -1, -2 \rangle$.

(b) Use part of your work from (a) to find an equation for the line of intersection of the planes $y + 2z = 1$ and $x = 1 + y + 2z$. 
2. Are the following lines parallel, skew, or intersecting?

Line 1: \( x = 4t, y = 2 - 4t, z = 6t + 5 \)

Line 2: \( x = -6s, y = 6s + 3, z = 2 - 9s \)