Math 241: Quiz 3

Show ALL Work   Name _____

1. Let $A = (2, 1, -3)$, and let $\mathcal{P}$ be the plane given by $x + y - z = 0$. Calculate the point B on the plane $\mathcal{P}$ that is nearest to A. Simplify your answer.

   Point B: ⬚ (simplify)

2. The two planes given by $x - 2y + z = 4$ and $2x + y - 2z = 5$ intersect in a line ℓ. Find the parametric equations for the line ℓ' which is parallel to ℓ and passes through the point $(1, 1, 0)$.

   Line: ⬚ (simplify)