Math 241: Quiz 4

Show ALL Work   Name _____

1. The plane $\mathcal{P}$ given by $7x - 4y + 4z = -3$ and the line ℓ given by $x = t + 3$, $y = 2t + 10$ and $z = -t - 1$ intersect at a point A. Calculate the point A.

   Point of Intersection A: [ ] (simplify)

2. Let $\mathcal{P}$ and A be as in the previous problem. Calculate a point B which is a distance 18 from A and a distance 18 from plane $\mathcal{P}$. (Note: There are two correct answers. You only need to give one. Also, if you are using line ℓ, you are likely doing something wrong.)

   Point of Intersection B: [ ] (simplify)