

"QUIZ" for Lecture 3

E-MAILSCANNED .pdf OF COMPLETED QUIZ to DrZcalc3@gmail.com (Attachment: q3FirstLast.pdf) ASAP BUT NO LATER THAN Sept. 15, 8:00pm

NAME:

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1. Find an equation of the plane that passes through the points $(0, 1, 1)$, $(1, 0, 1)$, $(1, 1, 0)$.

$$\begin{aligned}A &= \langle 0, 1, 1 \rangle = j + k \\B &= \langle 1, 0, 1 \rangle = i + k \\C &= \langle 1, 1, 0 \rangle = i + j\end{aligned}$$

?

2. Find the intersection of the line

$$\mathbf{r}(t) = \langle 1, 1, 0 \rangle + t\langle 0, 2, 4 \rangle$$

and the plane

$$x + y + z = 14$$

$$\mathbf{r}(t) = \langle 1, 1 + 2t, 4t \rangle$$

$$x + y + z = 14$$

$$1 + 1 + 2t + 4t = 14$$

$$2 + 6t = 14$$

$$6t = 12$$

$$t = 2$$

$$\underline{\underline{\langle 1, 5, 8 \rangle}}$$