"QUIZ" for Lecture 1

NAME: (print!) _____ **Section:** _____

E-MAIL ADDRESS: (print!) _____

1. Show that the triangle with vertices $P = (1, 0, 0)$, $Q = (0, 1, 0)$, and $R = (0, 0, 1)$ is an equilateral triangle.

2. Determine whether the following two lines ever meet. If they do meet, where?

$$\mathbf{r}_1(t) = \langle 1, 0, 0\rangle + t\langle 1, 2, 3\rangle \quad , \quad \mathbf{r}_2(t) = \langle 0, 1, 0\rangle + t\langle 2, 1, 3\rangle \quad .$$