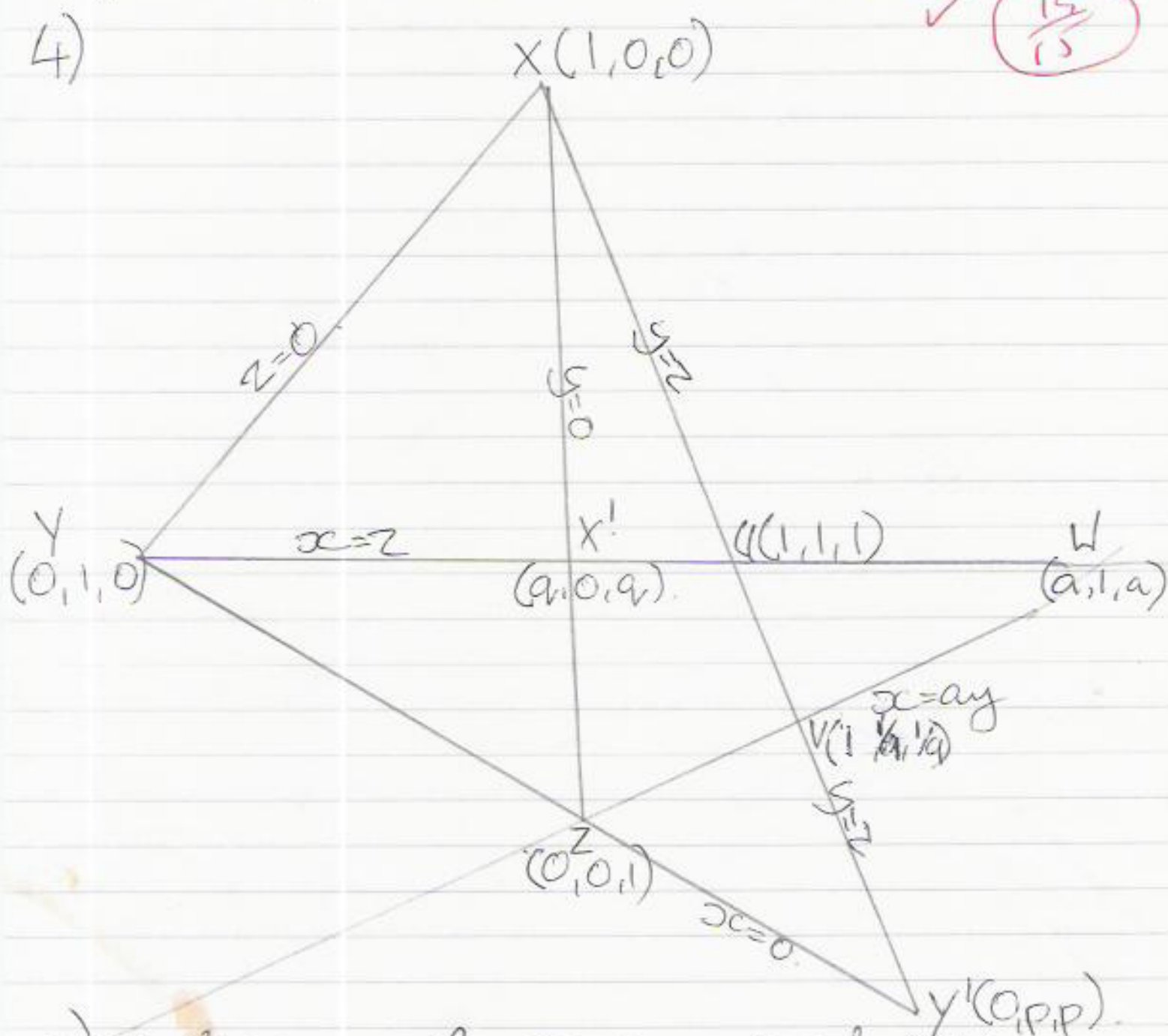


equal in this case to 0.7083.)

$\frac{11}{13}$

$\frac{12}{13}$

4)



a) V lies on $x=y$ and $x=z$, equation $y=z$. It therefore has coordinates $(1/3, 1/3, 1/3)$. (Homogeneous coordinates) *So use square brackets*
 W lies on $x=y$ and $x=z$, equation $x=z$. It therefore has coordinates $(a, 1, a)$
 b) XY has equation $z=0$

$$\begin{vmatrix} x & y & z \\ a & 0 & a \\ 0 & p & p \end{vmatrix} = x \begin{vmatrix} 0 & a \\ p & p \end{vmatrix} - y \begin{vmatrix} a & a \\ 0 & p \end{vmatrix} + z \begin{vmatrix} a & 0 \\ 0 & p \end{vmatrix}$$

$\frac{2}{3}$

$V = [1/3, 1/3, 1/3]; W = [a, 1, a]$