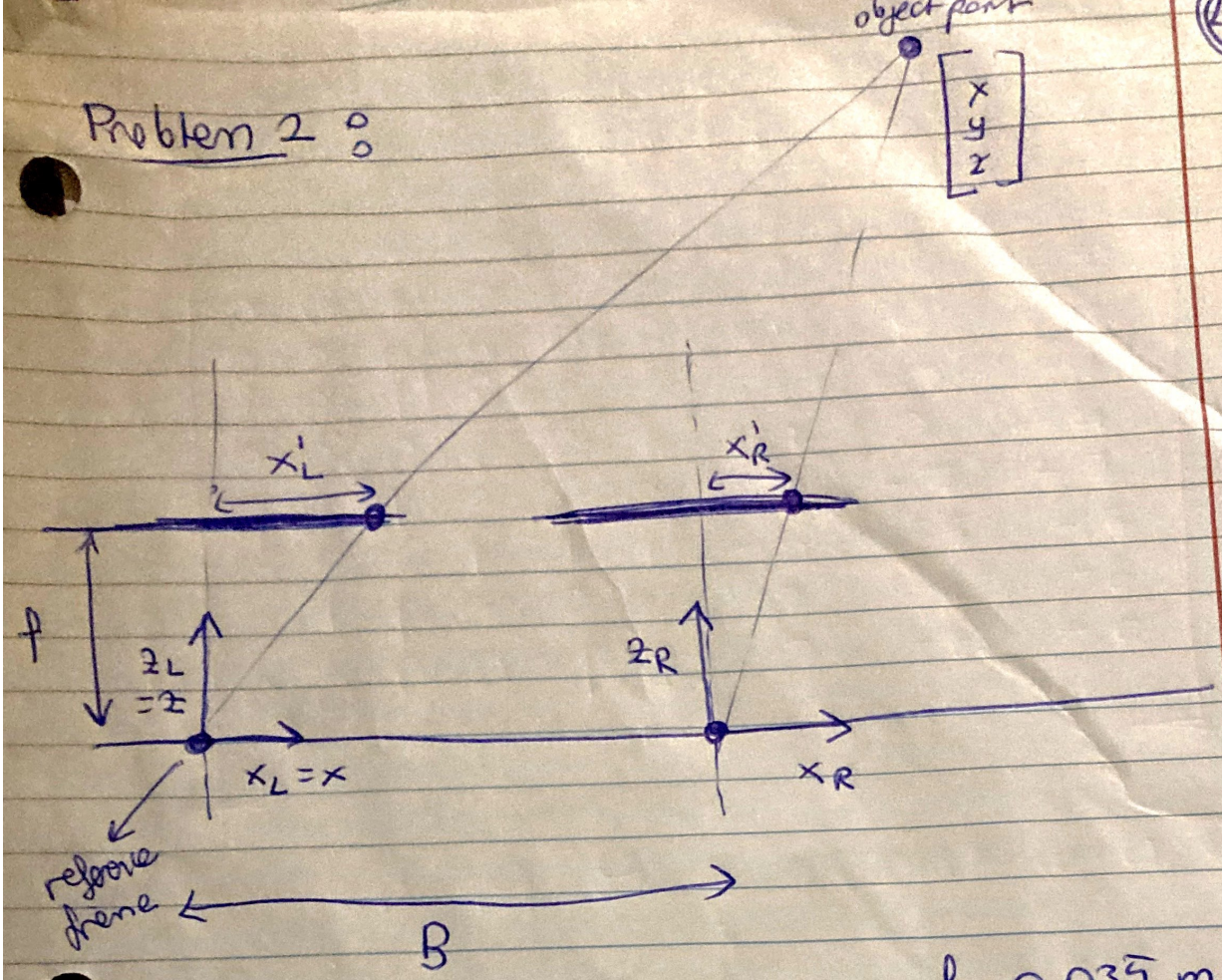
Problem 2 :



$f = 0.035$ m

$B = 0.15$ m

$(x_L', y_L') = (0.0047, 0.0)$

$(x_R', y_R') = (0.0029, 0.0)$

coordinates of the object point

Answer :

Using the ~~formula~~ equation for stereo backprojection

$$\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \frac{B}{d} \begin{bmatrix} x_L' \\ y_L' \\ f \end{bmatrix}$$

↓

object point

$$d = x_L' - x_R'$$

$$d = 0.0047 - 0.0029$$

$$= 0.0018$$

$$\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \frac{0.15}{0.0047 - 0.029} \begin{bmatrix} 0.0047 \\ 0 \\ 0.035 \end{bmatrix} = \begin{bmatrix} 0.392 \\ 0 \\ 2.917 \end{bmatrix}$$