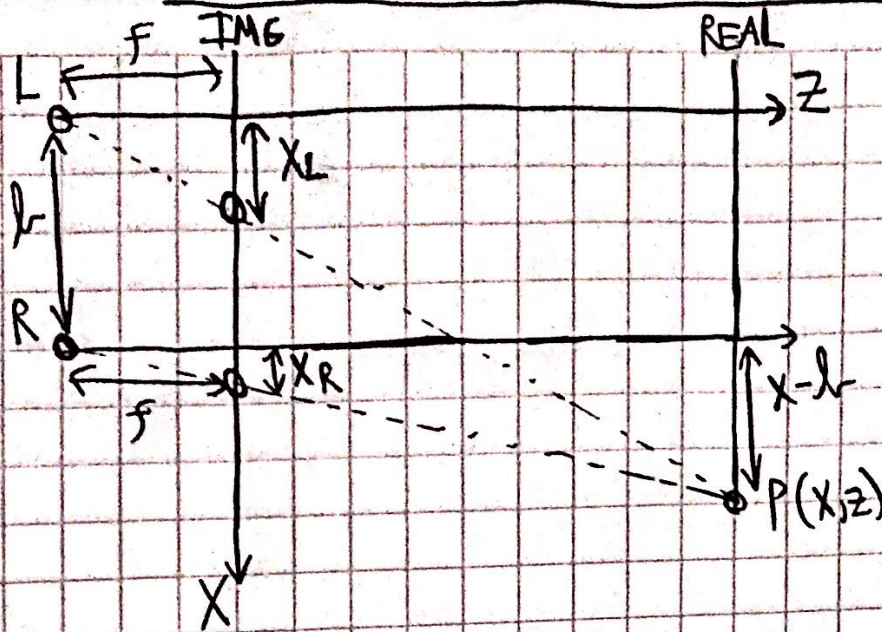


# Mini-TAREA 2 - IIC2685

BENJAMÍN FARGAS V.  
17642531



→ POR TALES, SE TIENEN LAS SIGUIENTES PROPORCIONES:

$$\frac{X_L}{f} = \frac{X}{Z} \quad (1)$$

$$\frac{X_L}{f} \cdot Z = \frac{X_R}{f} \cdot Z + l$$

$$\frac{X_R}{f} = \frac{X - l}{Z} \quad (2)$$

$$(3) \quad Z = \frac{l \cdot f}{(X_L - X_R)} \quad (1) \text{ y } (2)$$

↓ DISPARIDAD

→ CONOCEMOS:  $l = 70 \text{ (mm)}$   
 $f = 4 \text{ (mm)}$

$$\rightarrow \text{mm-to-pix} = \frac{1280 \text{ (pix)}}{3,58 \text{ (mm)}}$$

SEPARACIÓN  
EN PÍXELES

$$X_L^{\text{px}} - X_R^{\text{px}} = 143 \text{ (pix)}$$

INVERSO = PIX-TO-MMM

$$\frac{1}{1280} \rightarrow \frac{143 \cdot 3,58}{1280} = 0,4 \text{ (mm)}$$

$$\rightarrow \therefore X_L - X_R = X_L^{\text{px}} - X_R^{\text{px}} \cdot (\text{mm-to-pix}) = \frac{143 \cdot 3,58}{1280} = 0,4 \text{ (mm)}$$

$$\rightarrow \text{FINALMENTE: } Z = \frac{l \cdot f}{X_L - X_R} = \frac{70 \cdot 4}{0,4} = 700 \text{ (mm)} = 0,7 \text{ (m)}$$