

2) Let $f = 0.035$ $\beta = 0.15$

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

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

$$z = \frac{\beta f}{x_L' - x_R'} = \frac{0.15 \times 0.035}{(0.0047 - 0.0029)} = \frac{0.00525}{0.0018} = 2.9166$$

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

$$\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \frac{0.15}{0.0018} \begin{bmatrix} 0.0047 \\ 0 \\ 0.035 \end{bmatrix}$$

$$\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0.3916 \\ 0 \\ 2.9166 \end{bmatrix} = \begin{bmatrix} 0.3916 \\ 0 \\ 2.9166 \end{bmatrix}$$