



First Lens:

$$\begin{aligned} d_o &= 15 \text{ mm} \\ f &= -25 \text{ mm} \end{aligned} \rightarrow \frac{1}{15} + \frac{1}{d_i} = \frac{1}{-25}$$

$$\frac{1}{d_i} = -\frac{1}{25} - \frac{1}{15}$$

$$d_i = -9.375 \text{ mm}$$

Second Lens:

$$\begin{aligned} d_o &= L - d_i = 80 - (-9.375) = 89.375 \text{ mm} \\ f &= 40 \text{ mm} \end{aligned}$$

$$\rightarrow \frac{1}{d_i} = \frac{1}{40} - \frac{1}{89.375}$$

$$d_i = 72.4 \text{ mm}$$