



First Lens: $f = 35 \text{ mm}$
 $d_o = 15 \text{ mm}$

$$\frac{1}{d_i} = \frac{1}{f} - \frac{1}{d_o} = \frac{1}{35} - \frac{1}{15} \rightarrow d_i = -26.2 \text{ mm}$$

Second Lens: $d_o = L - d_i = 50 \text{ mm} - (-26.2 \text{ mm})$
 $= 76.2 \text{ mm}$

$$\frac{1}{d_i} = \frac{1}{40} - \frac{1}{76.2} \Rightarrow d_i = 84 \text{ mm}$$

$$x_i = 50 \text{ mm} + d_i = 134 \text{ mm}$$