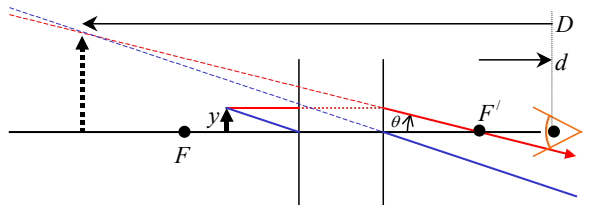
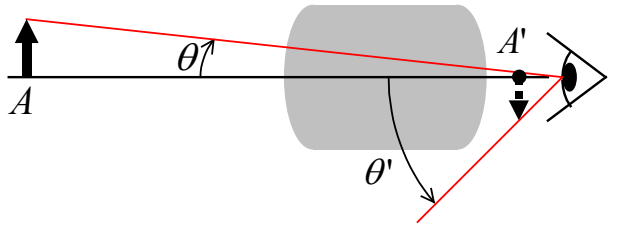
Magnifying Power

Focal System	Afocal System
	

Finite Object Distance	Object at Infinity
Intrinsic Magnifying Power $P_i = -\frac{1}{f'} = 4G_{ic}$ Magnifying Power $P = \frac{\theta'}{y} = P_i\left(1+\frac{d}{D}\right)$	Intrinsic Magnifying Power $G_i = \frac{f_1'}{f_2'}$ Magnifying Power $G = \frac{\theta'}{\theta} = \begin{cases} f_1'/f_2' & \text{Afocal System} \\ G_i(1+d/D) & \text{Focal System} \end{cases}$
Intrinsic Commercial Magnifying Power $G_{ic} = -\frac{1}{4f'} = \frac{P_i}{4}$ Magnifying Power $G = \frac{\theta'}{\theta} = 4G_{ic}\left(1+\frac{d}{D}\right)L_m$ Convention $\theta = \frac{y}{L_m}$ $\quad L_m = 250\,\text{mm}$	