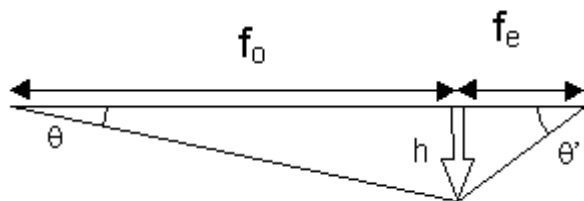
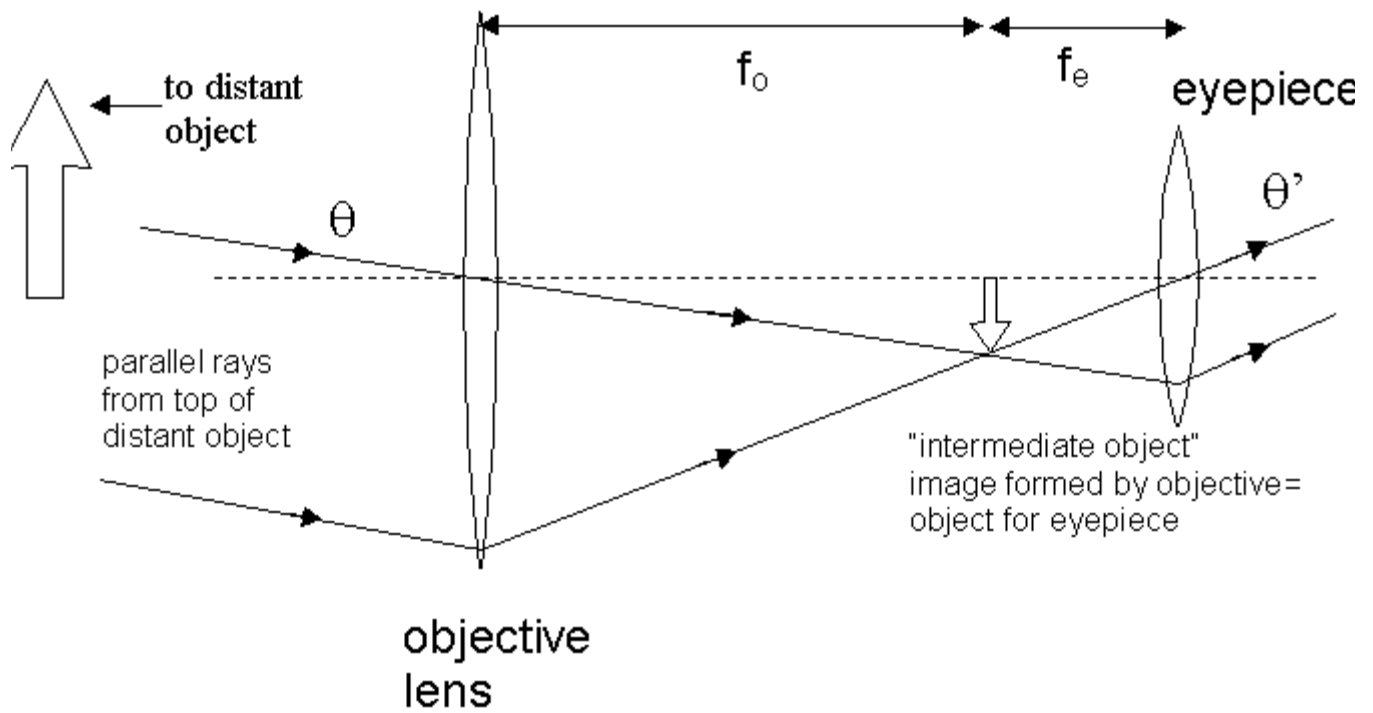


The refracting astronomical Telescope



Small angle approximation:

$$\tan \theta \cong \theta$$

$$\tan \theta = \frac{h}{f_o} \quad , \quad \tan \theta' = \frac{h}{f_e}$$

$$f_o \tan \theta = f_e \tan \theta' \quad , \quad f_o \theta = f_e \theta'$$

$$\text{angular magnification} = \frac{\theta'}{\theta} = \frac{f_o}{f_e}$$

