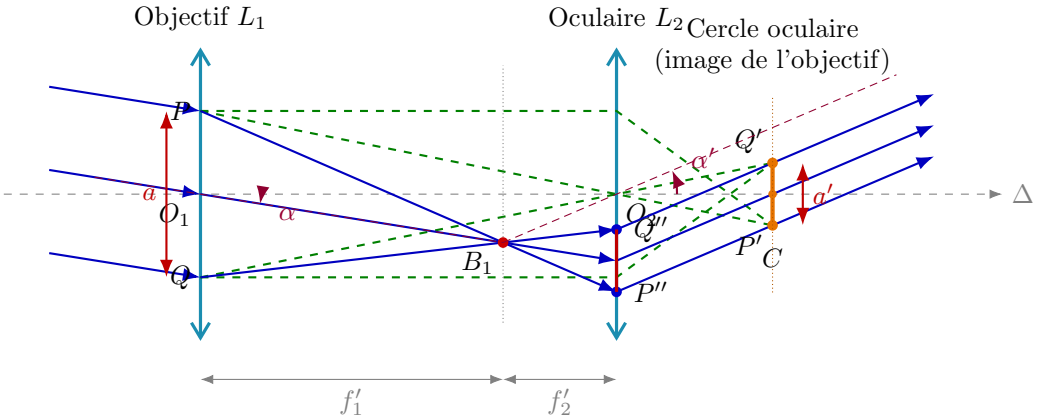


$$\frac{a'}{a} = \frac{P''Q''}{PQ} = \frac{f_2'}{f_1'} = \frac{3}{8}$$

$$G = \frac{\alpha'}{\alpha} = -\frac{a}{a'} = -\frac{8}{3}$$