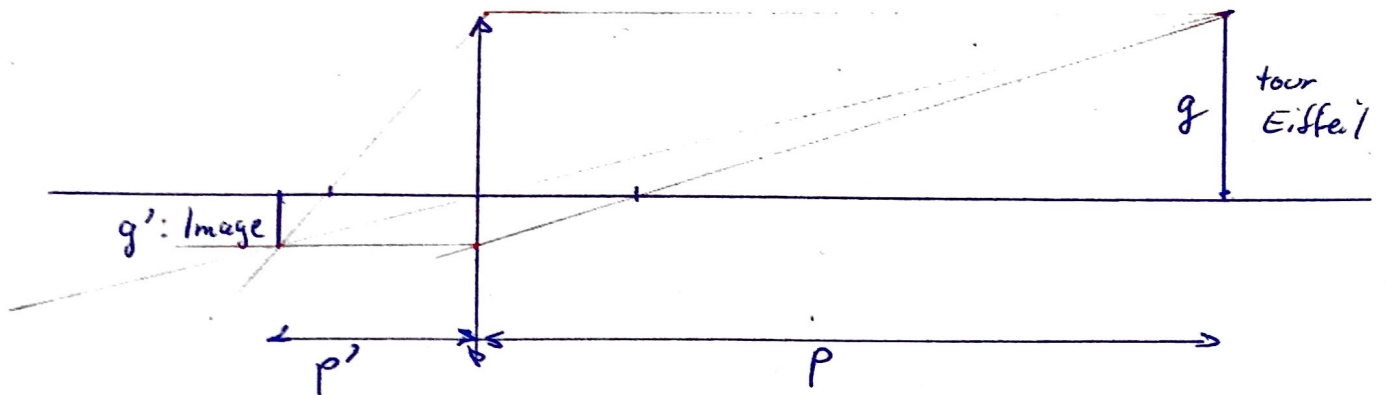


Certificat MEP 2015

6)



a) lentille convergente

b) réelle et renversée

c) $g = 301 \text{ [m]}$

$$p = 150 \text{ [m]}$$

$$f = 50 \text{ [mm]} = 0,05 \text{ [m]}$$

$$\bullet \frac{1}{p} + \frac{1}{p'} = \frac{1}{f} \Rightarrow \frac{1}{p'} = \frac{1}{f} - \frac{1}{p} = \frac{p-f}{fp}$$

$$\Rightarrow p' = \frac{fp}{p-f} = \frac{0,05 \cdot 150}{150 - 0,05} \approx 0,0500 \text{ [m]}$$

$$\bullet \frac{g'}{g} = \frac{p'}{p} \Rightarrow g' = \frac{p'}{p} g = \frac{0,0500 \cdot 301}{150}$$

$$\approx 0,1004 \text{ [m]}$$

L'image fait $\approx 10 \text{ [cm]}$.