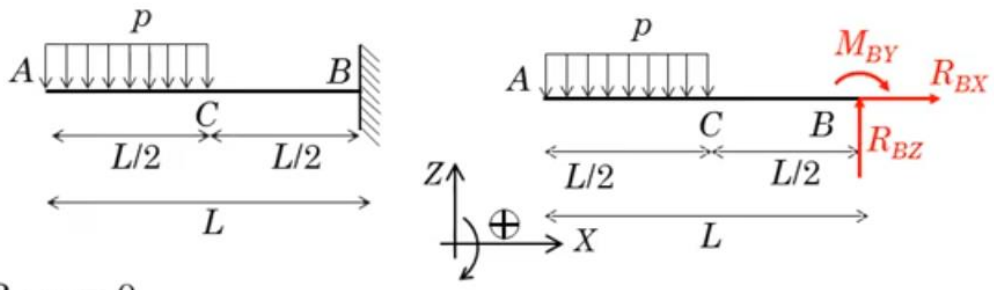
**Tracé direct**




$R_{BX} = 0$

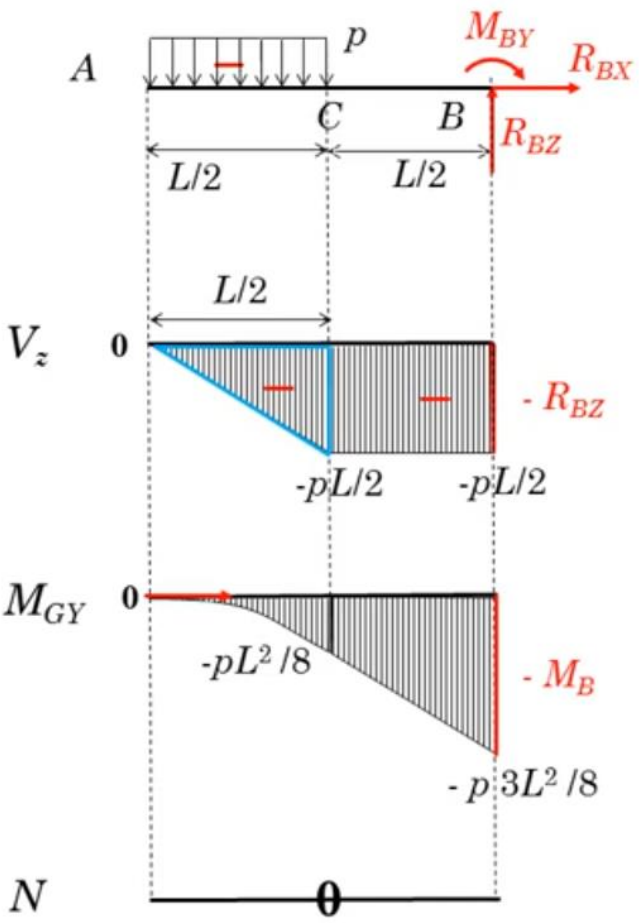
$R_{BZ} = p\frac{L}{2}$

$M_B = p\frac{3L^2}{8}$

- Diagrammes

$$\frac{\mathrm{d}V_z}{\mathrm{d}x} = q(x)$$

$$\frac{\mathrm{d}M_{Gy}}{\mathrm{d}x} = V_z$$




$R_{BX} = 0 \quad R_{BZ} = p\frac{L}{2}$

$M_B = p\frac{3L^2}{8}$

$q(x) < 0$ => $V_z$ décroissant

$q(x)$ constant => $V_z$ linéaire

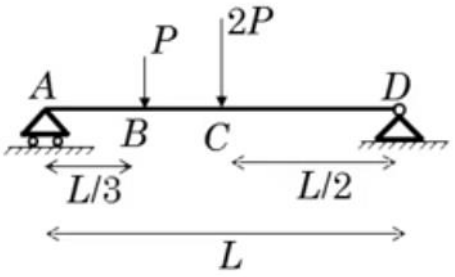
$q(x)=0$ => $V_z$ constant

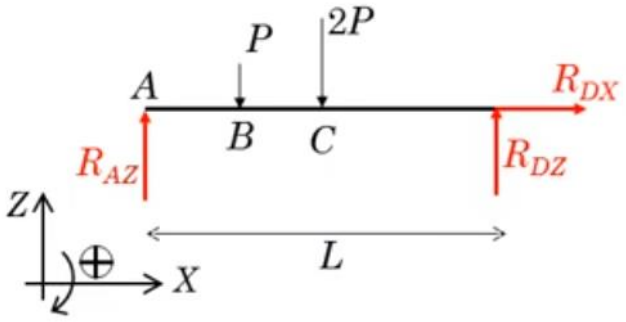
$V_z = 0$ => $M_{Gy}$ tangente horizontale

$V_z < 0$ => $M_{Gy}$ décroissant

$V_z$ linéaire => $M_{Gy}$ parabolique

$V_z$ constant => $M_{Gy}$ linéaire




$$R_{AZ} = \frac{5}{3}P$$

$$R_{DX} = 0$$

$$R_{DZ} = \frac{4}{3}P$$

- Diagrammes

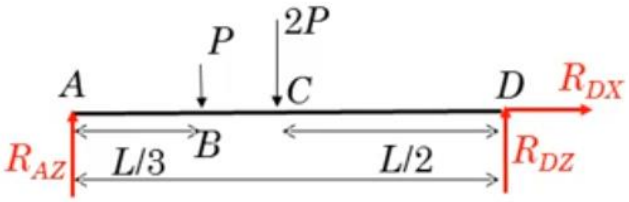
$$\frac{\mathrm{d}V_z}{\mathrm{d}x} = q(x)$$

$$\frac{\mathrm{d}M_{Gy}}{\mathrm{d}x} = V_z$$

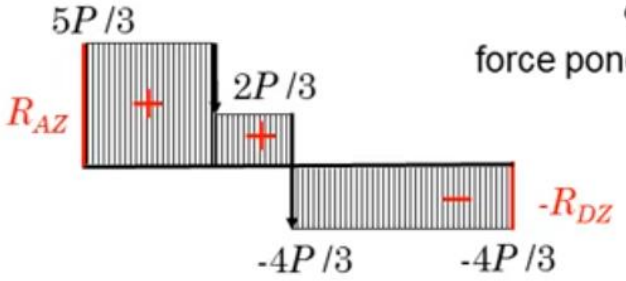
$R_{AZ} = \frac{5}{3}P$

$R_{DX} = 0$

$R_{DZ} = \frac{4}{3}P$




$V_z$




$q(x)=0 \Rightarrow V_z$ constant

force ponctuelle $\Rightarrow V_z$ discontinu

$V_z > 0 \Rightarrow M_{Gy}$ croissant

$V_z$ constant $\Rightarrow M_{Gy}$ linéaire

$V_z < 0 \Rightarrow M_{Gy}$ décroissant

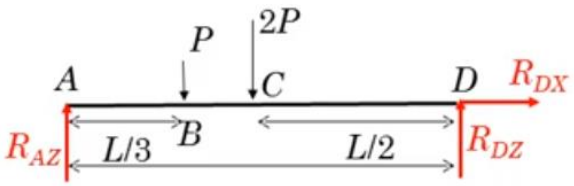
$M_{GY}$


$N$

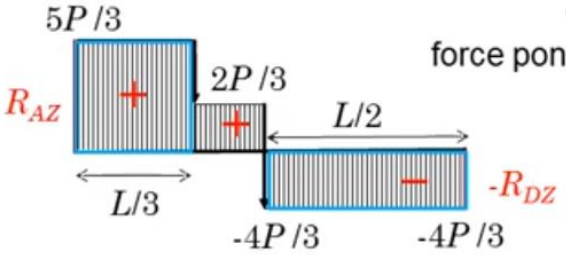
$$R_{AZ} = \frac{5}{3}P$$

$$R_{DX} = 0$$

$$R_{DZ} = \frac{4}{3}P$$



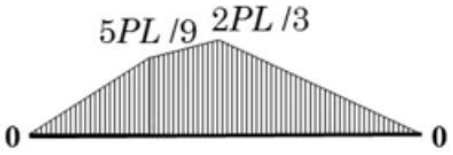

$V_z$




$q(x)=0$ => $V_z$ constant

force ponctuelle => $V_z$ discontinu

$M_{GY}$




$V_z > 0$ => $M_{Gy}$ croissant

$V_z$ constant => $M_{Gy}$ linéaire

$V_z < 0$ => $M_{Gy}$ décroissant

$N$