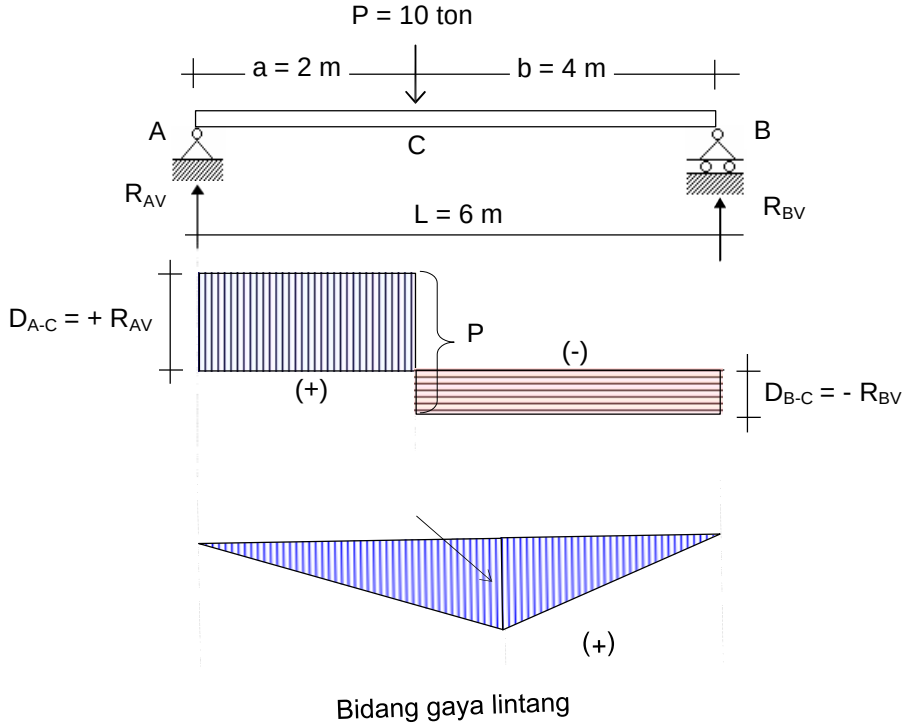
1. **Balok Diatas Dua Perletakan Memikul Sebuah Muatan Terpusat**.



Bidang gaya lintang

$M_C = P.a.b/L$

Bidang momen

Penyelesaian :

a. Reaksi Perletakan.

$\Sigma M_B = 0,$

$R_{AV} . L - P . b = 0$

$R_{AV} = P . b/L$

$= (10\ t) \times (4\ m)/(6\ m)$

$R_{AV} = + 6{,}667$ ton (↑)

$\Sigma M_A = 0,$

$- R_{BV} . L + P . a = 0$

$R_{BV} = P . a/L$

$= (10\ t) \times (2\ m)/(6\ m)$

$R_{BV} = + 3{,}333$ ton (↑).

Kontrol :

$\Sigma V = 0,$

$R_{AV} + R_{BV} - P = 0$

$6{,}667\ t + 3{,}333\ t - 10\ t = 0$ …..(memenuhi)

b. Gaya lintang.

$D_{A-C} = + R_{AV} = + 6{,}667$ ton.

$D_{C-A} = + D_{A-C} = + 6{,}667$ ton.

$D_{C-B} = D_{C-A} - P = 6{,}667 - 10 = - 3{,}333$ ton.

$D_{B-C} = D_{C-B} = - R_{BV} = - 3{,}333$ ton.

c. M o m e n .

$M_A = 0$

$M_C = + R_{AV} . a = + 6{,}667\ t \times 2\ m = + 13{,}334$ ton.m', atau

$M_C = P.a.b/L$

Lihat gambar bidang gaya lintang dan momen diatas.