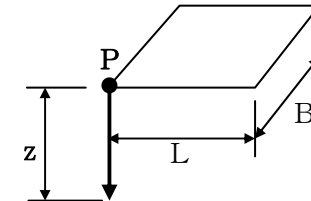
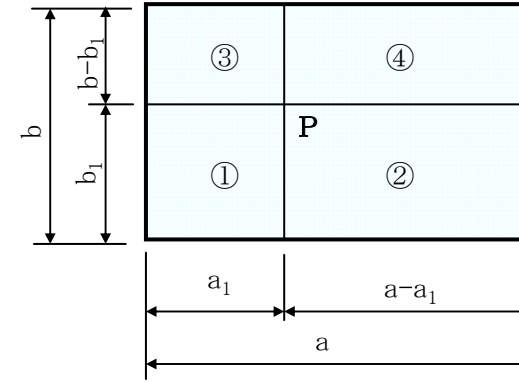


## Newmarkによる増加応力算定

盛土の単体	$\rho_t =$	20.0 KN/m <sup>2</sup>
盛土高	H =	10.0 m
荷重強度	q =	200.0 m
荷重面形状	a =	50.0 m
	b =	40.0 m
応力を求める位置	a <sub>1</sub> =	20.0 m
	b <sub>1</sub> =	15.0 m
	Z =	5.0 m

	①	②	③	④
L (m)	20.0	30.0	20.0	30.0
n = L/Z	4.0	6.0	4.0	6.0
B (m)	15.0	15.0	25.0	25.0
m = B/Z	3.0	3.0	5.0	5.0
n <sup>2</sup>	16.0	36.0	16.0	36.0
m <sup>2</sup>	9.0	9.0	25.0	25.0
{内第1項	0.37377	0.33712	0.30023	0.24951
{内第2項	1.16899	1.21045	1.25744	1.31412
I z (i)	0.24554	0.24630	0.24791	0.24886
Σ I z	0.989			
△P	197.8			



$$I_z = \frac{1}{2\pi} \left\{ \frac{mn}{\sqrt{m^2+n^2+1}} \times \frac{m^2+n^2+2}{(m^2+1)(n^2+1)} + \text{Sin}^{-1} \frac{mn}{\sqrt{(m^2+1)(n^2+1)}} \right\}$$

※  $m = B/Z, n = L/z$