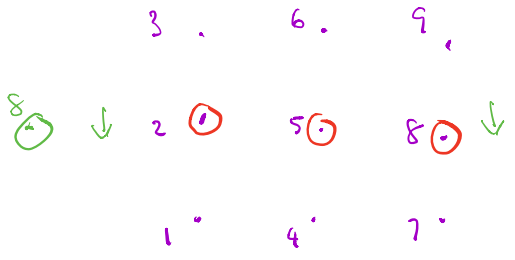


$$u_2 + u_8 - 4u_5 = h^2 f_5$$

$$u_5 + u_8 - 4u_2 = h^2 f_2$$

$$u_5 + u_2 - 4u_8 = h^2 f_8$$

$$\frac{1}{3}\left[2u_5 - 3u_2 - 3u_8\right] = h^2 (f_2 + f_8)/3$$

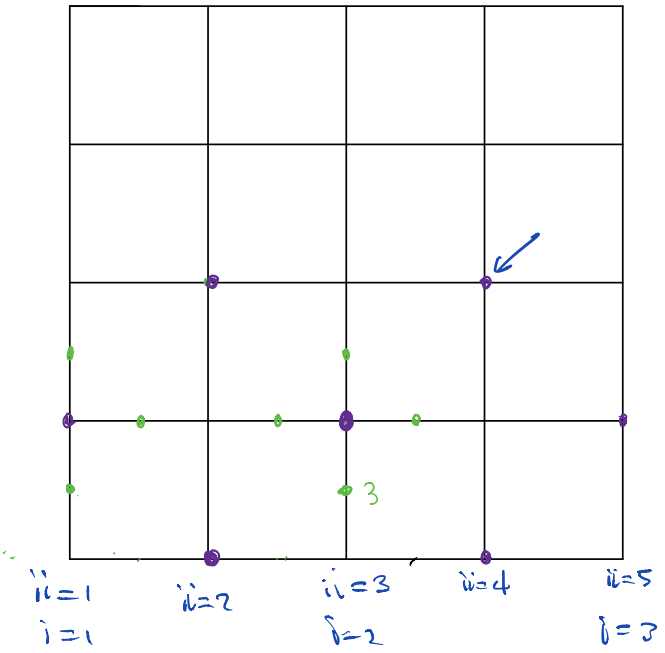
$$\left(-4 + \frac{2}{3}\right) u_5 = h^2 \left[f_5 + \frac{f_2 + f_8}{3} \right]$$

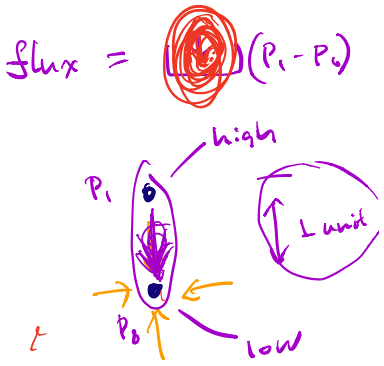
$$-\frac{10}{3} u_5 = h^2 \frac{3f_5 + f_2 + f_8}{3}$$

$$u_5 = -\frac{h^2}{10}\left[3f_5 + f_2 + f_8\right]$$

$$= \left(f_5 + \frac{1}{3} f_8 + \frac{1}{3} f_2\right) \Big/ \left(\frac{1}{3} + \frac{1}{3} - 4\right)$$

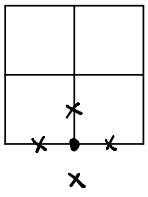
$$= \frac{(3f_5 + f_8 + f_2)}{-10}$$

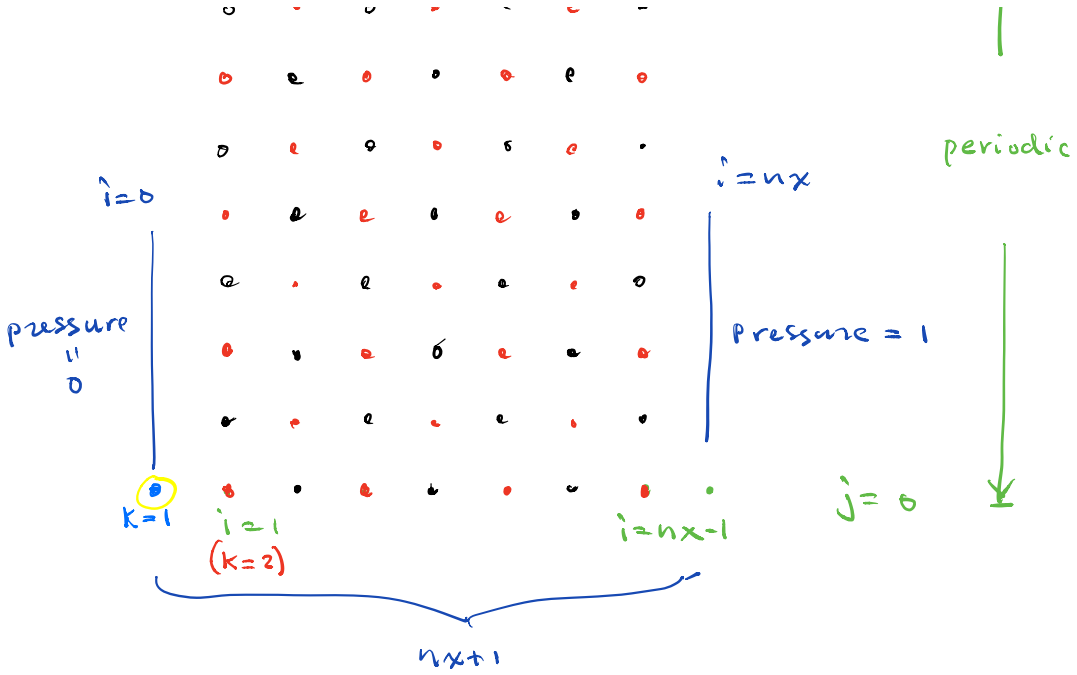


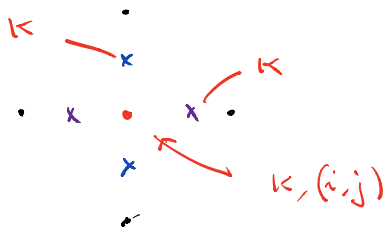


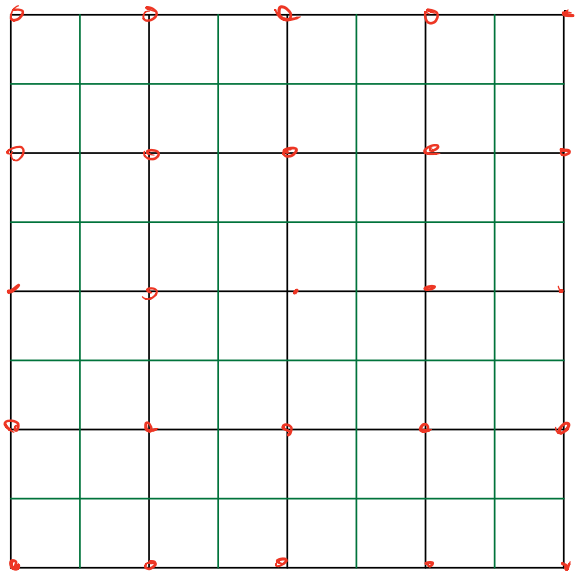
$R = f(eps)$

eps ~ dist




periodic
i=0
i=nx
pressure
=
0
Pressure = 1
k=1
i=1
(k=2)
i=nx-1
j=0
nx+1


k
k
k, (i, j)



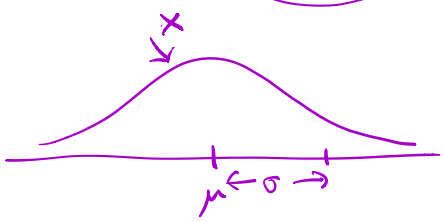
1, nx-1

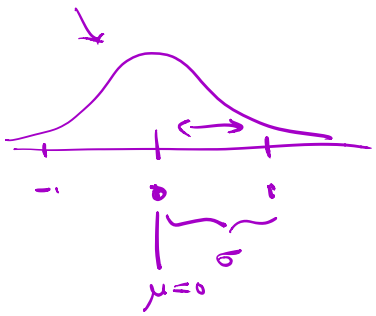
2, nx-2

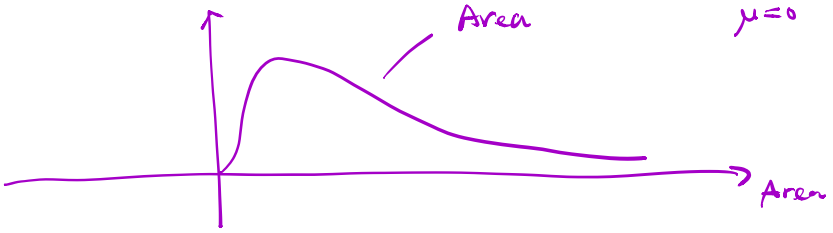
lognormal

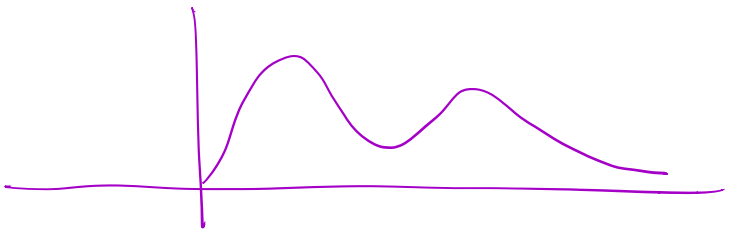
Area = $e^{\mu + \sigma z}$

z = Normal dist $(0, 1)$









bimodal dist

$a_1, a_2, \ldots, a_n$

sum = $a_1 + a_2 + \ldots + a_n$

```
sum = 0
for i = 1 : n
{ sum = sum + a_i }
end
```

$a_1, a_2, \ldots, a_n$

$b_1, b_2, \ldots, b_n$

$c_i = a_i + b_i$

```
( for i = 1 : n
```

$$\begin{cases} c(i) = a(i) + b(i) \\ \text{end} \end{cases} \iff c(:) = a(:) + b(:)$$

$$\Updownarrow$$

$$\boxed{c = a + b}$$

$$a_1 + a_3 + a_5 + a_7$$
$$b_1 + b_3 + b_5 + b_7$$

$$\Rightarrow \quad c_1 = a_1 + b_1$$
$$c_3 = a_3 + b_3$$
$$\vdots$$

$$c(1:2:7) = a(1:2:7) + b(1:2:7)$$