How to find Z_α value:

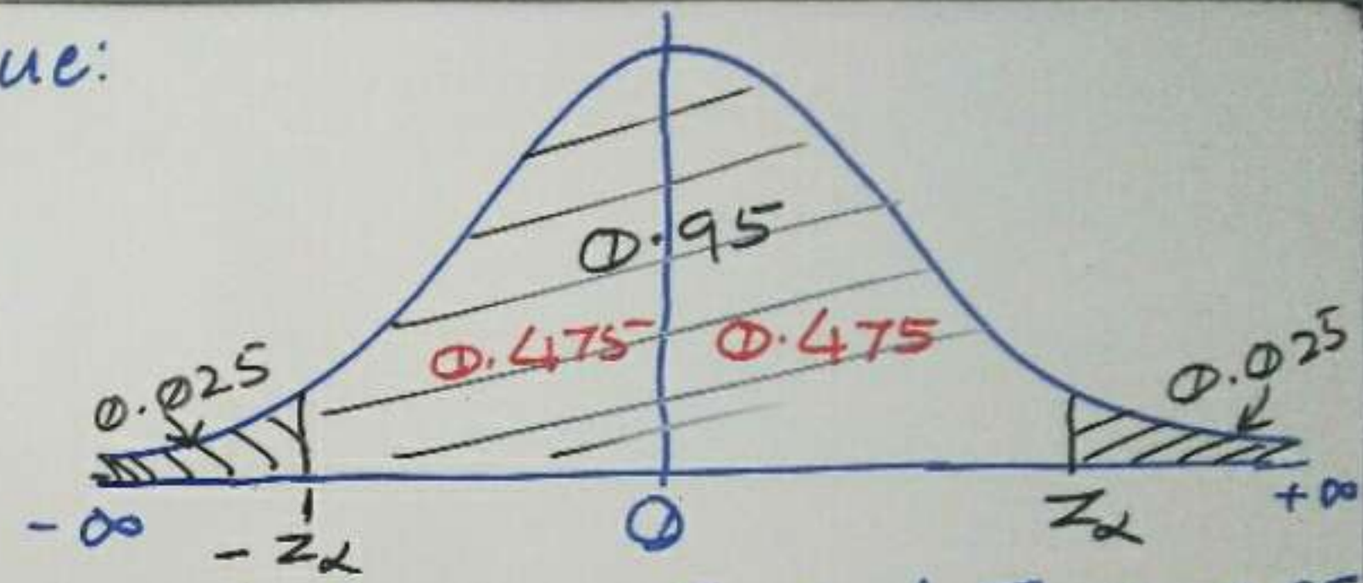
(i) Two tailed Value.

Let $1-\alpha = 95\% = 0.95$

$\therefore \alpha = 1 - 0.95 = 0.05$

Since we are using two tailed case, divide α into 2 equal parts

$\therefore \frac{\alpha}{2} = \frac{0.05}{2} = 0.025$



Area between $-Z_\alpha$ and Z_α is 0.95

i.e Area from 0 to $Z_\alpha = 0.475$

Use Std. Normal Table. Find 0.475 or a number very close to 0.475 in area (prob) section.

0.475 occurs at 1.96 $\therefore Z_\alpha = 1.96$

Locate on S.N. curve

	0.05	0.06	0.07
1.9	0.4744	0.4750	0.4756

→ Area section

How to find Z_α value:

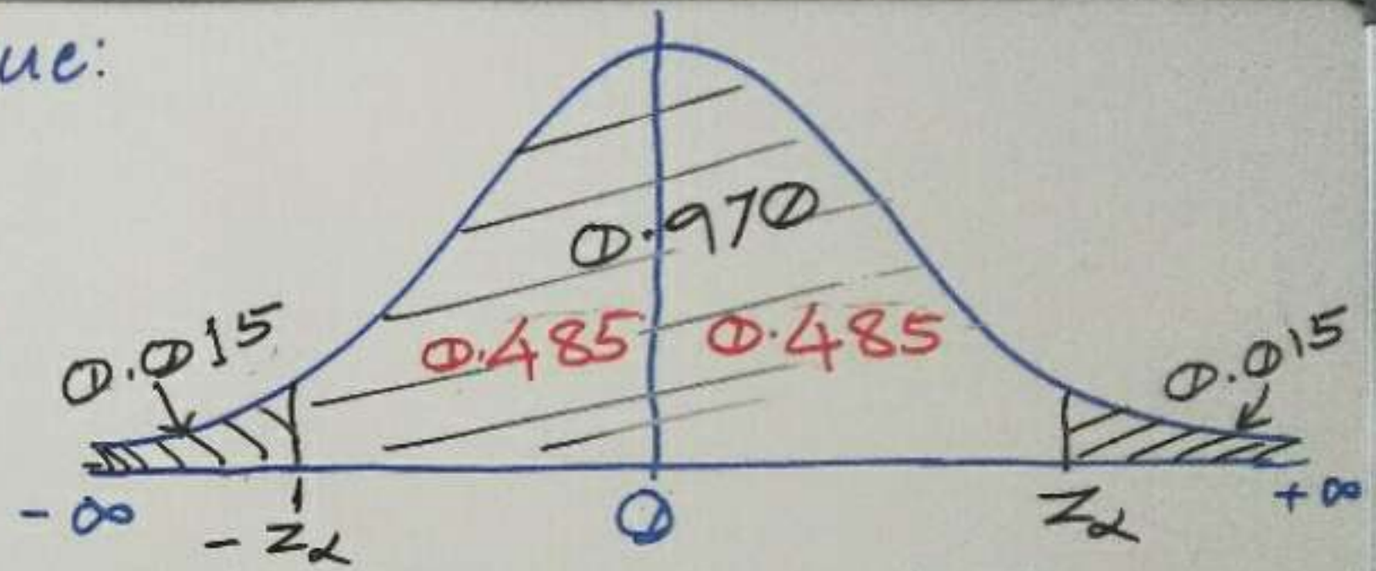
(i) Two tailed Value.

Let $1-\alpha = 97\% = 0.97$

$\therefore \alpha = 1 - 0.97 = 0.03$

Since we are using two tailed case, divide α into 2 equal parts

$\therefore \frac{\alpha}{2} = \frac{0.03}{2} = 0.015$



Area between $-Z_\alpha$ and Z_α is 0.97

i.e Area from 0 to $Z_\alpha = 0.485$

Use Std. Normal Table. Find 0.475 or a number very close to 0.475 in area (prob) section.

Locate on S.N. curve

0.485 occurs at 2.17 $\therefore Z_\alpha = 2.17$

	0.06	0.07	0.08	
2.1	0.4846	0.4850	0.4854	→ Area section

How to find Z_α value:

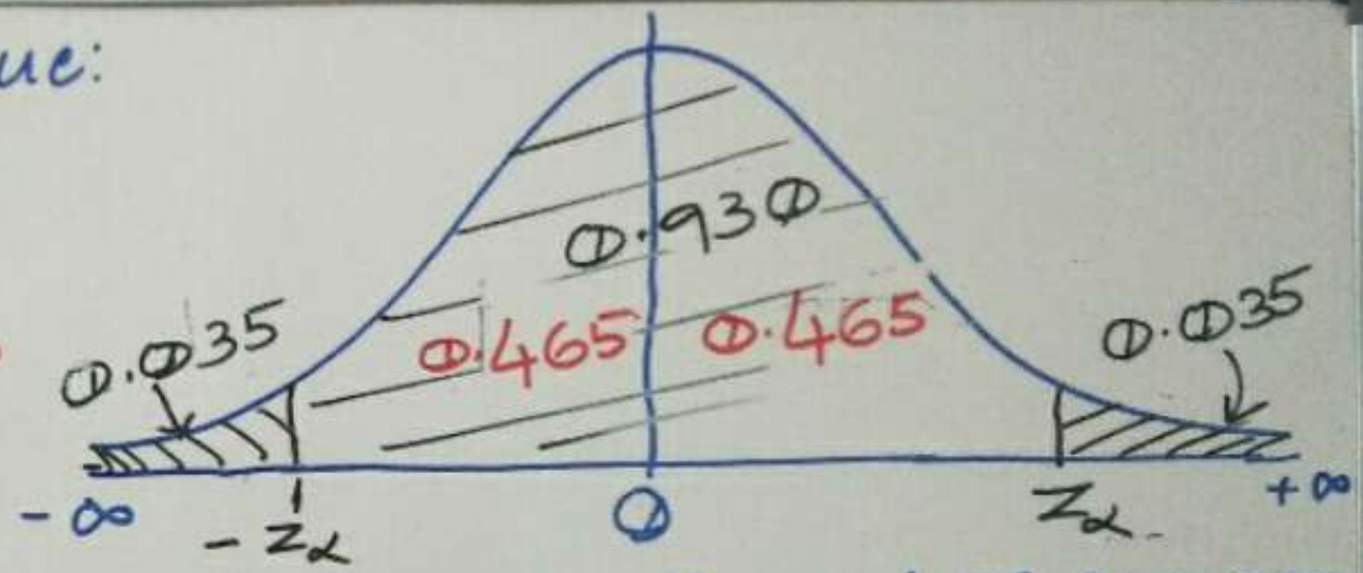
(i) Two tailed Value

Let $1-\alpha = 93\% = 0.93$

$\therefore \alpha = 1 - 0.93 = 0.07$

Since we are using two tailed case, divide α into 2 equal parts

$\therefore \frac{\alpha}{2} = \frac{0.07}{2} = 0.035$



Area between $-Z_\alpha$ and Z_α is 0.930

i.e Area from 0 to $Z_\alpha = 0.465$

Use Std. Normal Table. Find 0.475 or a number very close to 0.475 in area (prob) section.

Locate on S.N. curve

0.465 occurs at 1.81 $\therefore Z_\alpha = 1.81$

	0.00	0.01	0.02
1.8	0.4641	0.4649	0.4656

↑ Area section