

Cumulative: (Example Page 60)

x	P(X≤x) : cumulative	P(X= x)
0	0.05	0.05
1	0.30	0.30 – 0.05= 0.25
2	0.75	0.75-0.30 =0.45
3	1	1- 0.75 =0.25
total	xxxxxxx	Total=1

x	P(X= x)
0	0.05
1	0.25
2	0.45
3	0.25
total	1

Extra example:

x	P(X≤x) : cumulative	P(X= x)
2	0.15	0.15
4	0.30	0.30 -0.15 =0.15
6	0.80	0.80 -0.30 =0.50
8	1	1- 0.80 =0.20
total	xxxxx	

x	P(X= x)
2	0.15
4	0.15
6	0.50
8	0.20
total	Total=1

Complement of probability:

$$P(X > 1) = 1 - P(X \leq 1)$$

$$P(X \geq 1) = 1 - P(X < 1)$$

$$P(X \leq 1) = 1 - P(X > 1)$$

$$P(X < 1) = 1 - P(X \geq 1)$$