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Mathematik > Wahrscheinlichkeitstafeln > Poissonverteilung

Wahrscheinlichkeitstafel: Poissonverteilung P(0.1) bis P(1)

Parameter λ = 0.1, 0.2, 0.25, 0.3, 0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1 als erwartete Ereignishäufigkeit, Zufallsvariable X als bestimmte Anzahl k des Auftretens eines Ereignisses E mit p(X=k), p(X≤k) (kumuliert), Erwartungswert μ, Standardabweichung σ

P(0.1)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.90483742	0.90483742
1	0.09048374	0.99532116
2	0.00452419	0.99984535
3	0.00015081	0.99999615
4	0.00000377	0.99999992
5	8e-8	1
6	0	1
...	...	...
P(0.1)		
μ = 0.1		
σ = 0.316		

P(0.2)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.81873075	0.81873075
1	0.16374615	0.9824769
2	0.01637462	0.99885152
3	0.00109164	0.99994316
4	0.00005458	0.99999774
5	0.00000218	0.99999993
6	7e-8	1
7	0	1
...	...	...
P(0.2)		
μ = 0.2		
σ = 0.447		

P(0.25)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.77880078	0.77880078
1	0.1947002	0.97350098
2	0.02433752	0.9978385
3	0.00202813	0.99986663
4	0.00012676	0.99999339
5	0.00000634	0.99999973
6	2.6e-7	0.99999999

7	1e-8	1
8	0	1
...	...	...
P(0.25)		
μ = 0.25		
σ = 0.5		

P(0.3)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.74081822	0.74081822
1	0.22224547	0.96306369
2	0.03333682	0.99640051
3	0.00333368	0.99973419
4	0.00025003	0.99998421
5	0.000015	0.99999922
6	7.5e-7	0.99999997
7	3e-8	1
8	0	1
...	...	...
P(0.3)		
μ = 0.3		
σ = 0.548		

P(0.4)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.67032005	0.67032005
1	0.26812802	0.93844806
2	0.0536256	0.99207367
3	0.00715008	0.99922375
4	0.00071501	0.99993876
5	0.0000572	0.99999596
6	0.00000381	0.99999977
7	2.2e-7	0.99999999
8	1e-8	1
9	0	1
...	...	...
P(0.4)		
μ = 0.4		
σ = 0.632		

P(0.5)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.60653066	0.60653066
1	0.30326533	0.90979599

2	0.07581633	0.98561232
3	0.01263606	0.99824838
4	0.00157951	0.99982788
5	0.00015795	0.99998584
6	0.00001316	0.999999
7	9.4e-7	0.99999994
8	6e-8	1
9	0	1
...	...	...
P(0.5)		
μ = 0.5		
σ = 0.707		

P(0.6)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.54881164	0.54881164
1	0.32928698	0.87809862
2	0.09878609	0.97688471
3	0.01975722	0.99664193
4	0.00296358	0.99960551
5	0.00035563	0.99996114
6	0.00003556	0.99999671
7	0.00000305	0.99999976
8	2.3e-7	0.99999998
9	2e-8	1
10	0	1
...	...	...
P(0.6)		
μ = 0.6		
σ = 0.775		

P(0.7)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.4965853	0.4965853
1	0.34760971	0.84419502
2	0.1216634	0.96585842
3	0.02838813	0.99424654
4	0.00496792	0.99921446
5	0.00069551	0.99990997
6	0.00008114	0.99999112
7	0.00000811	0.99999923
8	7.1e-7	0.99999994
9	6e-8	1
10	0	1
...	...	...

P(0.7)
μ = 0.7
σ = 0.837

P(0.75)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.47236655	0.47236655
1	0.35427491	0.82664147
2	0.13285309	0.95949456
3	0.03321327	0.99270783
4	0.00622749	0.99893532
5	0.00093412	0.99986945
6	0.00011677	0.99998621
7	0.00001251	0.99999872
8	0.00000117	0.99999989
9	1e-7	0.99999999
10	1e-8	1
11	0	1
...	...	...
P(0.75)		
μ = 0.75		
σ = 0.866		

P(0.8)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.44932896	0.44932896
1	0.35946317	0.80879214
2	0.14378527	0.9525774
3	0.03834274	0.99092014
4	0.00766855	0.99858869
5	0.00122697	0.99981566
6	0.0001636	0.99997925
7	0.0000187	0.99999795
8	0.00000187	0.99999982
9	1.7e-7	0.99999999
10	1e-8	1
11	0	1
...	...	...
P(0.8)		
μ = 0.8		
σ = 0.894		

P(0.9)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.40656966	0.40656966
1	0.36591269	0.77248235
2	0.16466071	0.93714307
3	0.04939821	0.98654128
4	0.0111146	0.99765588
5	0.00200063	0.99965651
6	0.00030009	0.9999566
7	0.00003858	0.99999518
8	0.00000434	0.99999952
9	4.3e-7	0.99999996
10	4e-8	1
11	0	1
...	...	...
P(0.9)		
μ = 0.9		
σ = 0.949		

P(1)		
k =	**p(X=k)** =	**p(x≤k)** =
0	0.36787944	0.36787944
1	0.36787944	0.73575888
2	0.18393972	0.9196986
3	0.06131324	0.98101184
4	0.01532831	0.99634015
5	0.00306566	0.99940582
6	0.00051094	0.99991676
7	0.00007299	0.99998975
8	0.00000912	0.99999887
9	0.00000101	0.99999989
10	1e-7	0.99999999
11	1e-8	1
12	0	1
...	...	...
P(1)		
μ = 1		
σ = 1		

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