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Mathematik > Wahrscheinlichkeitstafeln > Poissonverteilung

Wahrscheinlichkeitstafel: Poissonverteilung P(4) bis P(5)

Parameter λ = 4, 4.1, 4.2, 4.25, 4.3, 4.4, 4.5, 4.6, 4.7, 4.75, 4.8, 4.9, 5 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(4)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.01831564	0.01831564
1	0.07326256	0.09157819
2	0.14652511	0.23810331
3	0.19536681	0.43347012
4	0.19536681	0.62883694
5	0.15629345	0.78513039
6	0.10419563	0.88932602
7	0.05954036	0.94886638
8	0.02977018	0.97863657
9	0.01323119	0.99186776
10	0.00529248	0.99716023
11	0.00192454	0.99908477
12	0.00064151	0.99972628
13	0.00019739	0.99992367
14	0.0000564	0.99998007
15	0.00001504	0.99999511
16	0.00000376	0.99999887
17	8.8e-7	0.99999975
18	2e-7	0.99999995
19	4e-8	0.99999999
20	1e-8	1
21	0	1
...	...	...
P(4)		
μ = 4		
σ = 2		

P(4.1)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.01657268	0.01657268
1	0.06794797	0.08452064
2	0.13929334	0.22381398
3	0.19036756	0.41418154
4	0.19512675	0.60930829
5	0.16000393	0.76931223
6	0.10933602	0.87864825
7	0.06403967	0.94268792

8	0.03282033	0.97550825
9	0.01495148	0.99045973
10	0.00613011	0.99658984
11	0.00228486	0.9988747
12	0.00078066	0.99965536
13	0.00024621	0.99990157
14	0.0000721	0.99997367
15	0.00001971	0.99999338
16	0.00000505	0.99999843
17	0.00000122	0.99999965
18	2.8e-7	0.99999992
19	6e-8	0.99999998
20	1e-8	1
21	0	1
...	...	...
P(4.1)		
μ = 4.1		
σ = 2.025		

P(4.2)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.01499558	0.01499558
1	0.06298142	0.077977
2	0.13226099	0.21023799
3	0.18516538	0.39540337
4	0.19442365	0.58982702
5	0.16331587	0.75314289
6	0.11432111	0.867464
7	0.06859266	0.93605666
8	0.03601115	0.97206781
9	0.0168052	0.98887301
10	0.00705819	0.9959312
11	0.00269494	0.99862614
12	0.00094323	0.99956937
13	0.00030474	0.99987411
14	0.00009142	0.99996553
15	0.0000256	0.99999113
16	0.00000672	0.99999784
17	0.00000166	0.9999995
18	3.9e-7	0.99999989
19	9e-8	0.99999998
20	2e-8	1
21	0	1
...	...	...
P(4.2)		
μ = 4.2		

σ = 2.049

P(4.25)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.01426423	0.01426423
1	0.06062299	0.07488723
2	0.12882386	0.20371109
3	0.18250047	0.38621156
4	0.19390675	0.58011831
5	0.16482074	0.74493905
6	0.11674802	0.86168708
7	0.07088273	0.9325698
8	0.03765645	0.97022625
9	0.01778221	0.98800847
10	0.00755744	0.99556591
11	0.00291992	0.99848583
12	0.00103414	0.99951996
13	0.00033808	0.99985805
14	0.00010263	0.99996068
15	0.00002908	0.99998976
16	0.00000772	0.99999748
17	0.00000193	0.99999941
18	4.6e-7	0.99999987
19	1e-7	0.99999997
20	2e-8	0.99999999
21	0	1
...	...	...
P(4.25)		
μ = 4.25		
σ = 2.062		

P(4.3)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.01356856	0.01356856
1	0.0583448	0.07191336
2	0.12544133	0.19735469
3	0.17979924	0.37715393
4	0.19328418	0.57043811
5	0.16622439	0.7366625
6	0.11912748	0.85578998
7	0.07317831	0.9289683
8	0.03933334	0.96830164
9	0.0187926	0.98709423
10	0.00808082	0.99517505
11	0.00315886	0.99833392

12	0.00113193	0.99946584
13	0.00037441	0.99984025
14	0.000115	0.99995524
15	0.00003297	0.99998821
16	0.00000886	0.99999707
17	0.00000224	0.99999931
18	5.4e-7	0.99999985
19	1.2e-7	0.99999997
20	3e-8	0.99999999
21	1e-8	1
22	0	1
...	...	...
P(4.3)		
μ = 4.3		
σ = 2.074		

P(4.4)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.01227734	0.01227734
1	0.0540203	0.06629764
2	0.11884465	0.18514229
3	0.17430549	0.35944777
4	0.19173604	0.55118381
5	0.16872771	0.71991152
6	0.12373366	0.84364518
7	0.07777544	0.92142062
8	0.04277649	0.96419711
9	0.02091295	0.98511006
10	0.0092017	0.99431176
11	0.00368068	0.99799244
12	0.00134958	0.99934202
13	0.00045678	0.9997988
14	0.00014356	0.99994236
15	0.00004211	0.99998447
16	0.00001158	0.99999605
17	0.000003	0.99999905
18	7.3e-7	0.99999978
19	1.7e-7	0.99999995
20	4e-8	0.99999999
21	1e-8	1
22	0	1
...	...	...
P(4.4)		
μ = 4.4		
σ = 2.098		

P(4.5)		
k =	p(X=k) =	p(X≤k) =
0	0.011109	0.011109
1	0.04999048	0.06109948
2	0.11247859	0.17357807
3	0.16871788	0.34229596
4	0.18980762	0.53210358
5	0.17082686	0.70293043
6	0.12812014	0.83105058
7	0.08236295	0.91341353
8	0.04632916	0.95974269
9	0.02316458	0.98290727
10	0.01042406	0.99333133
11	0.00426439	0.99759572
12	0.00159915	0.99919486
13	0.00055355	0.99974841
14	0.00017793	0.99992634
15	0.00005338	0.99997972
16	0.00001501	0.99999473
17	0.00000397	0.9999987
18	9.9e-7	0.9999997
19	2.4e-7	0.99999993
20	5e-8	0.99999999
21	1e-8	1
22	0	1
...	...	...
P(4.5)		
μ = 4.5		
σ = 2.121		

P(4.6)		
k =	p(X=k) =	p(X≤k) =
0	0.01005184	0.01005184
1	0.04623844	0.05629028
2	0.10634842	0.1626387
3	0.16306758	0.32570628
4	0.18752772	0.513234
5	0.1725255	0.6857595
6	0.13226955	0.81802905
7	0.08691999	0.90494904
8	0.04997899	0.95492804
9	0.02554482	0.98047286
10	0.01175062	0.99222347
11	0.00491389	0.99713737
12	0.00188366	0.99902103
13	0.00066653	0.99968755

14	0.000219	0.99990655
15	0.00006716	0.99997371
16	0.00001931	0.99999302
17	0.00000522	0.99999825
18	0.00000134	0.99999958
19	3.2e-7	0.99999991
20	7e-8	0.99999998
21	2e-8	1
22	0	1
...	...	...
P(4.6)		
μ = 4.6		
σ = 2.145		

P(4.7)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.00909528	0.00909528
1	0.0427478	0.05184308
2	0.10045734	0.15230042
3	0.15738316	0.30968357
4	0.18492521	0.49460879
5	0.1738297	0.66843849
6	0.1361666	0.80460508
7	0.09142614	0.89603123
8	0.05371286	0.94974409
9	0.02805005	0.97779414
10	0.01318352	0.99097766
11	0.00563296	0.99661062
12	0.00220624	0.99881686
13	0.00079764	0.9996145
14	0.00026778	0.99988228
15	0.0000839	0.99996619
16	0.00002465	0.99999083
17	0.00000681	0.99999765
18	0.00000178	0.99999943
19	4.4e-7	0.99999987
20	1e-7	0.99999997
21	2e-8	0.99999999
22	0	1
...	...	...
P(4.7)		
μ = 4.7		
σ = 2.168		

P(4.75)		
k =	p(X=k) =	p(X≤k) =
0	0.0086517	0.0086517
1	0.04109555	0.04974725
2	0.09760194	0.14734918
3	0.1545364	0.30188558
4	0.18351197	0.48539756
5	0.17433638	0.65973393
6	0.1380163	0.79775023
7	0.09365392	0.89140415
8	0.05560701	0.94701116
9	0.02934815	0.97635931
10	0.01394037	0.99029967
11	0.0060197	0.99631938
12	0.0023828	0.99870218
13	0.00087064	0.99957282
14	0.0002954	0.99986821
15	0.00009354	0.99996175
16	0.00002777	0.99998952
17	0.00000776	0.99999728
18	0.00000205	0.99999933
19	5.1e-7	0.99999984
20	1.2e-7	0.99999997
21	3e-8	0.99999999
22	1e-8	1
23	0	1
...	...	...
P(4.75)		
μ = 4.75		
σ = 2.179		

P(4.8)		
k =	p(X=k) =	p(X≤k) =
0	0.00822975	0.00822975
1	0.03950279	0.04773253
2	0.09480669	0.14253922
3	0.1516907	0.29422992
4	0.18202884	0.47625875
5	0.17474768	0.65100644
6	0.13979815	0.79080458
7	0.09586159	0.88666617
8	0.05751695	0.94418312
9	0.03067571	0.97485883
10	0.01472434	0.98958317
11	0.00642517	0.99600834
12	0.00257007	0.9985784

13	0.00094895	0.99952735
14	0.00032535	0.9998527
15	0.00010411	0.99995682
16	0.00003123	0.99998805
17	0.00000882	0.99999687
18	0.00000235	0.99999922
19	5.9e-7	0.99999982
20	1.4e-7	0.99999996
21	3e-8	0.99999999
22	1e-8	1
23	0	1
...	...	...
P(4.8)		
μ = 4.8		
σ = 2.191		

P(4.9)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.00744658	0.00744658
1	0.03648826	0.04393484
2	0.08939623	0.13333107
3	0.14601384	0.27934491
4	0.17886696	0.45821187
5	0.17528962	0.63350149
6	0.14315319	0.77665467
7	0.10020723	0.8768619
8	0.06137693	0.93823883
9	0.03341633	0.97165516
10	0.016374	0.98802916
11	0.00729387	0.99532304
12	0.00297833	0.99830137
13	0.0011226	0.99942397
14	0.00039291	0.99981688
15	0.00012835	0.99994523
16	0.00003931	0.99998454
17	0.00001133	0.99999587
18	0.00000308	0.99999895
19	8e-7	0.99999975
20	1.9e-7	0.99999994
21	5e-8	0.99999999
22	1e-8	1
23	0	1
...	...	...
P(4.9)		
μ = 4.9		
σ = 2.214		

P(5)		
k =	**p(X=k)** =	**p(X≤k)** =
0	0.00673795	0.00673795
1	0.03368973	0.04042768
2	0.08422434	0.12465202
3	0.1403739	0.26502592
4	0.17546737	0.44049329
5	0.17546737	0.61596065
6	0.14622281	0.76218346
7	0.10444486	0.86662833
8	0.06527804	0.93190637
9	0.03626558	0.96817194
10	0.01813279	0.98630473
11	0.00824218	0.99454691
12	0.00343424	0.99798115
13	0.00132086	0.99930201
14	0.00047174	0.99977375
15	0.00015725	0.99993099
16	0.00004914	0.99998013
17	0.00001445	0.99999458
18	0.00000401	0.9999986
19	0.00000106	0.99999965
20	2.6e-7	0.99999992
21	6e-8	0.99999998
22	1e-8	1
23	0	1
...	...	...
P(5)		
μ = 5		
σ = 2.236		