

Mathematik > Wahrscheinlichkeitstabeln > Poissonverteilung

Wahrscheinlichkeitstafel: Poissonverteilung P(8) bis P(9)

Parameter $\lambda = 8, 8.1, 8.2, 8.25, 8.3, 8.4, 8.5, 8.6, 8.7, 8.75, 8.8, 8.9, 9$ als erwartete Ereignishäufigkeit, Zufallsvariable X als bestimmte Anzahl k des Auftretens eines Ereignisses E mit $p(X=k)$, $p(X \leq k)$ (kumuliert), Erwartungswert μ , Standardabweichung σ

P(8)		
k =	p(X=k) =	p(X≤k) =
0	0.00033546	0.00033546
1	0.0026837	0.00301916
2	0.0107348	0.01375397
3	0.02862614	0.04238011
4	0.05725229	0.0996324
5	0.09160366	0.19123606
6	0.12213822	0.31337428
7	0.13958653	0.45296081
8	0.13958653	0.59254734
9	0.12407692	0.71662426
10	0.09926153	0.81588579
11	0.07219021	0.888076
12	0.0481268	0.9362028
13	0.02961649	0.9658193
14	0.01692371	0.98274301
15	0.00902598	0.99176899
16	0.00451299	0.99628198
17	0.00212376	0.99840574
18	0.00094389	0.99934963
19	0.00039743	0.99974706
20	0.00015897	0.99990603
21	0.00006056	0.99996659
22	0.00002202	0.99998861
23	0.00000766	0.99999627
24	0.00000255	0.99999883
25	8.2e-7	0.99999964
26	2.5e-7	0.9999999
27	7e-8	0.99999997
28	2e-8	0.99999999
29	1e-8	1
30	0	1
...
P(8)		
$\mu = 8$		
$\sigma = 2.828$		

P(8.1)		
k =	p(X=k) =	p(X≤k) =
0	0.00030354	0.00030354
1	0.00245867	0.00276221
2	0.0099576	0.01271981
3	0.02688552	0.03960533
4	0.05444319	0.09404852
5	0.08819796	0.18224648
6	0.11906725	0.30131373
7	0.13777781	0.43909154
8	0.13950004	0.57859158
9	0.12555003	0.70414161
10	0.10169553	0.80583714
11	0.07488489	0.88072203
12	0.0505473	0.93126933
13	0.03149486	0.96276418
14	0.01822202	0.98098621
15	0.00983989	0.9908261
16	0.00498145	0.99580754
17	0.00237351	0.99818106
18	0.00106808	0.99924914
19	0.00045534	0.99970448
20	0.00018441	0.99988889
21	0.00007113	0.99996002
22	0.00002619	0.99998621
23	0.00000922	0.99999543
24	0.00000311	0.99999855
25	0.00000101	0.99999955
26	3.1e-7	0.99999987
27	9e-8	0.99999996
28	3e-8	0.99999999
29	1e-8	1
30	0	1
...
P(8.1)		
$\mu = 8.1$		
$\sigma = 2.846$		

P(8.2)		
k =	p(X=k) =	p(X≤k) =
0	0.00027465	0.00027465
1	0.00225216	0.00252681
2	0.00923385	0.01176067
3	0.0252392	0.03699986
4	0.05174036	0.08874022
5	0.08485418	0.17359441

6	0.11596739	0.28956179
7	0.13584751	0.4254093
8	0.1392437	0.564653
9	0.12686648	0.69151948
10	0.10403051	0.79554999
11	0.07755002	0.87310001
12	0.05299251	0.92609252
13	0.03342605	0.95951857
14	0.01957811	0.97909668
15	0.0107027	0.98979938
16	0.00548513	0.99528452
17	0.00264577	0.99793029
18	0.0012053	0.99913558
19	0.00052018	0.99965576
20	0.00021327	0.99986904
21	0.00008328	0.99995231
22	0.00003104	0.99998335
23	0.00001107	0.99999442
24	0.00000378	0.9999982
25	0.00000124	0.99999944
26	3.9e-7	0.99999983
27	1.2e-7	0.99999995
28	3e-8	0.99999999
29	1e-8	1
30	0	1
...
P(8.2)		
$\mu = 8.2$		
$\sigma = 2.864$		

P(8.25)		
k =	p(X=k) =	p(X≤k) =
0	0.00026126	0.00026126
1	0.00215538	0.00241664
2	0.00889096	0.0113076
3	0.02445013	0.03575772
4	0.05042839	0.08618611
5	0.08320684	0.16939295
6	0.1144094	0.28380235
7	0.13483965	0.41864201
8	0.13905339	0.5576954
9	0.12746561	0.68516101
10	0.10515913	0.79032014
11	0.07886935	0.86918948
12	0.05422268	0.92341216
13	0.03441054	0.9578227

14	0.02027764	0.97810034
15	0.0111527	0.98925305
16	0.00575061	0.99500366
17	0.00279074	0.9977944
18	0.00127909	0.99907349
19	0.00055539	0.99962888
20	0.0002291	0.99985798
21	0.00009	0.99994798
22	0.00003375	0.99998174
23	0.00001211	0.99999384
24	0.00000416	0.999998
25	0.00000137	0.99999938
26	4.4e-7	0.99999981
27	1.3e-7	0.99999995
28	4e-8	0.99999998
29	1e-8	1
30	0	1
...
P(8.25)		
$\mu = 8.25$		
$\sigma = 2.872$		

P(8.3)		
k =	p(X=k) =	p(X≤k) =
0	0.00024852	0.00024852
1	0.00206269	0.00231121
2	0.00856016	0.01087137
3	0.02368312	0.03455448
4	0.04914246	0.08369695
5	0.08157649	0.16527344
6	0.11284748	0.27812092
7	0.13380487	0.41192578
8	0.13882255	0.55074833
9	0.12802524	0.67877357
10	0.10626095	0.78503452
11	0.08017872	0.86521324
12	0.05545695	0.92067018
13	0.03540713	0.95607731
14	0.02099137	0.97706868
15	0.01161522	0.9886839
16	0.0060254	0.9947093
17	0.00294181	0.99765111
18	0.0013565	0.99900761
19	0.00059258	0.99960019
20	0.00024592	0.99984611
21	0.0000972	0.99994331

22	0.00003667	0.99997998
23	0.00001323	0.99999321
24	0.00000458	0.99999778
25	0.00000152	0.9999993
26	4.9e-7	0.99999979
27	1.5e-7	0.99999994
28	4e-8	0.99999998
29	1e-8	1
30	0	1
...

P(8.3)

$\mu = 8.3$

$\sigma = 2.881$

P(8.4)

k =	p(X=k) =	p(X≤k) =
0	0.00022487	0.00022487
1	0.00188889	0.00211375
2	0.00793332	0.01004707
3	0.02221329	0.03226037
4	0.04664792	0.07890828
5	0.0783685	0.15727678
6	0.1097159	0.26699268
7	0.13165908	0.39865176
8	0.13824203	0.5368938
9	0.1290259	0.6659197
10	0.10838176	0.77430145
11	0.08276425	0.8570657
12	0.05793497	0.91500068
13	0.03743491	0.95243558
14	0.02246094	0.97489653
15	0.01257813	0.98747466
16	0.00660352	0.99407817
17	0.00326291	0.99734109
18	0.00152269	0.99886378
19	0.00067319	0.99953697
20	0.00028274	0.99981971
21	0.0001131	0.99993281
22	0.00004318	0.99997599
23	0.00001577	0.99999176
24	0.00000552	0.99999728
25	0.00000185	0.99999914
26	6e-7	0.99999974
27	1.9e-7	0.99999992
28	6e-8	0.99999998
29	2e-8	0.99999999

30	0	1
...
P(8.4)		
$\mu = 8.4$		
$\sigma = 2.898$		

P(8.5)		
k =	p(X=k) =	p(X≤k) =
0	0.00020347	0.00020347
1	0.00172948	0.00193295
2	0.00735029	0.00928324
3	0.02082584	0.03010908
4	0.0442549	0.07436398
5	0.07523333	0.14959731
6	0.10658055	0.25617786
7	0.12941924	0.3855971
8	0.13750794	0.52310505
9	0.12986861	0.65297366
10	0.11038832	0.76336198
11	0.08530007	0.84866205
12	0.06042088	0.90908293
13	0.03950596	0.94858889
14	0.02398576	0.97257465
15	0.01359193	0.98616658
16	0.00722071	0.99338729
17	0.00361036	0.99699765
18	0.00170489	0.99870254
19	0.00076271	0.99946525
20	0.00032415	0.99978941
21	0.00013121	0.99992061
22	0.00005069	0.99997131
23	0.00001873	0.99999004
24	0.00000664	0.99999668
25	0.00000226	0.99999893
26	7.4e-7	0.99999967
27	2.3e-7	0.9999999
28	7e-8	0.99999997
29	2e-8	0.99999999
30	1e-8	1
31	0	1
...
P(8.5)		
$\mu = 8.5$		
$\sigma = 2.915$		

P(8.6)		
k =	p(X=k) =	p(X≤k) =
0	0.00018411	0.00018411
1	0.00158331	0.00176742
2	0.00680823	0.00857565
3	0.01951693	0.02809258
4	0.0419614	0.07005399
5	0.07217362	0.1422276
6	0.10344885	0.24567645
7	0.1270943	0.37277075
8	0.13662637	0.50939713
9	0.13055409	0.63995122
10	0.11227652	0.75222773
11	0.08777982	0.84000756
12	0.06290887	0.90291643
13	0.04161664	0.94453307
14	0.02556451	0.97009758
15	0.01465698	0.98475456
16	0.00787813	0.99263269
17	0.00398541	0.9966181
18	0.00190414	0.99852224
19	0.00086187	0.99938411
20	0.00037061	0.99975471
21	0.00015177	0.99990649
22	0.00005933	0.99996581
23	0.00002218	0.999988
24	0.00000795	0.99999595
25	0.00000273	0.99999868
26	9e-7	0.99999959
27	2.9e-7	0.99999987
28	9e-8	0.99999996
29	3e-8	0.99999999
30	1e-8	1
31	0	1
...
P(8.6)		
$\mu = 8.6$		
$\sigma = 2.933$		

P(8.7)		
k =	p(X=k) =	p(X≤k) =
0	0.00016659	0.00016659
1	0.0014493	0.00161588
2	0.00630444	0.00792032
3	0.01828288	0.0262032
4	0.03976526	0.06596845

5	0.06919154	0.13516
6	0.10032774	0.23548774
7	0.12469305	0.36018079
8	0.13560369	0.49578447
9	0.13108357	0.62686804
10	0.1140427	0.74091074
11	0.09019741	0.83110815
12	0.06539312	0.89650128
13	0.04376309	0.94026437
14	0.02719563	0.96746
15	0.01577347	0.98323347
16	0.00857682	0.99181029
17	0.00438932	0.99619961
18	0.0021215	0.99832111
19	0.00097142	0.99929253
20	0.00042257	0.9997151
21	0.00017506	0.99989017
22	0.00006923	0.9999594
23	0.00002619	0.99998558
24	0.00000949	0.99999508
25	0.0000033	0.99999838
26	0.00000111	0.99999949
27	3.6e-7	0.99999984
28	1.1e-7	0.99999995
29	3e-8	0.99999999
30	1e-8	1
31	0	1
...
P(8.7)		
$\mu = 8.7$		
$\sigma = 2.95$		

P(8.75)		
k =	p(X=k) =	p(X≤k) =
0	0.00015846	0.00015846
1	0.00138654	0.001545
2	0.0060661	0.0076111
3	0.01769278	0.02530388
4	0.03870297	0.06400685
5	0.06773019	0.13173704
6	0.0987732	0.23051023
7	0.12346649	0.35397673
8	0.13504148	0.48901821
9	0.13129033	0.62030853
10	0.11487904	0.73518757
11	0.09138105	0.82656862

12	0.06663202	0.89320064
13	0.04484847	0.93804911
14	0.0280303	0.9660794
15	0.01635101	0.98243041
16	0.00894196	0.99137237
17	0.00460248	0.99597484
18	0.00223732	0.99821216
19	0.00103034	0.9992425
20	0.00045077	0.99969328
21	0.00018782	0.9998811
22	0.0000747	0.9999558
23	0.00002842	0.99998422
24	0.00001036	0.99999458
25	0.00000363	0.99999821
26	0.00000122	0.99999943
27	4e-7	0.99999982
28	1.2e-7	0.99999995
29	4e-8	0.99999998
30	1e-8	1
31	0	1
...
P(8.75)		
$\mu = 8.75$		
$\sigma = 2.958$		

P(8.8)		
k =	p(X=k) =	p(X≤k) =
0	0.00015073	0.00015073
1	0.00132645	0.00147718
2	0.00583638	0.00731357
3	0.01712006	0.02443363
4	0.03766414	0.06209777
5	0.06628888	0.12838665
6	0.09722369	0.22561033
7	0.12222407	0.3478344
8	0.13444647	0.48228087
9	0.13145877	0.61373965
10	0.11568372	0.72942337
11	0.09254698	0.82197034
12	0.06786778	0.88983813
13	0.04594127	0.93577939
14	0.02887737	0.96465676
15	0.01694139	0.98159815
16	0.00931776	0.99091592
17	0.00482331	0.99573923
18	0.00235806	0.99809729

19	0.00109216	0.99918945
20	0.00048055	0.99967
21	0.00020137	0.99987137
22	0.00008055	0.99995192
23	0.00003082	0.99998274
24	0.0000113	0.99999404
25	0.00000398	0.99999802
26	0.00000135	0.99999936
27	4.4e-7	0.9999998
28	1.4e-7	0.99999994
29	4e-8	0.99999998
30	1e-8	1
31	0	1
...
P(8.8)		
$\mu = 8.8$		
$\sigma = 2.966$		

P(8.9)		
k =	p(X=k) =	p(X≤k) =
0	0.00013639	0.00013639
1	0.00121386	0.00135025
2	0.00540168	0.00675193
3	0.01602499	0.02277693
4	0.03565561	0.05843254
5	0.06346699	0.12189953
6	0.0941427	0.21604223
7	0.11969572	0.33573795
8	0.13316149	0.46889944
9	0.13168192	0.60058136
10	0.11719691	0.71777826
11	0.09482295	0.81260121
12	0.07032702	0.88292823
13	0.04814696	0.93107519
14	0.03060771	0.96168291
15	0.01816058	0.97984348
16	0.01010182	0.9899453
17	0.0052886	0.9952339
18	0.00261492	0.99784882
19	0.00122488	0.9990737
20	0.00054507	0.99961878
21	0.00023101	0.99984978
22	0.00009345	0.99994324
23	0.00003616	0.9999794
24	0.00001341	0.99999281
25	0.00000477	0.99999758

26	0.00000163	0.99999922
27	5.4e-7	0.99999975
28	1.7e-7	0.99999993
29	5e-8	0.99999998
30	2e-8	0.99999999
31	0	1
...
P(8.9)		
$\mu = 8.9$		
$\sigma = 2.983$		

P(9)		
k =	p(X=k) =	p(X≤k) =
0	0.00012341	0.00012341
1	0.00111069	0.0012341
2	0.0049981	0.0062322
3	0.01499429	0.02122649
4	0.03373716	0.05496364
5	0.06072688	0.11569052
6	0.09109032	0.20678084
7	0.11711612	0.32389696
8	0.13175564	0.4556526
9	0.13175564	0.58740824
10	0.11858008	0.70598832
11	0.09702006	0.80300838
12	0.07276505	0.87577343
13	0.0503758	0.92614923
14	0.03238444	0.95853367
15	0.01943067	0.97796434
16	0.01092975	0.98889409
17	0.00578634	0.99468043
18	0.00289317	0.9975736
19	0.00137045	0.99894405
20	0.0006167	0.99956075
21	0.0002643	0.99982505
22	0.00010812	0.99993317
23	0.00004231	0.99997548
24	0.00001587	0.99999135
25	0.00000571	0.99999706
26	0.00000198	0.99999904
27	6.6e-7	0.99999969
28	2.1e-7	0.99999991
29	7e-8	0.99999997
30	2e-8	0.99999999
31	1e-8	1

32	0	1
...
P(9)		
$\mu = 9$		
$\sigma = 3$		

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