

Mathematik > Wahrscheinlichkeitstafeln > Poissonverteilung

Wahrscheinlichkeitstafel: Poissonverteilung P(9) bis P(10)

Parameter $\lambda = 9, 9.1, 9.2, 9.25, 9.3, 9.4, 9.5, 9.6, 9.7, 9.75, 9.8, 9.9, 10$ 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(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)		
$\mu = 9$		
$\sigma = 3$		

P(9.1)		
k =	p(X=k) =	p(X≤k) =
0	0.00011167	0.00011167
1	0.00101616	0.00112782
2	0.00462352	0.00575135
3	0.01402469	0.01977603
4	0.03190616	0.05168219
5	0.05806921	0.10975141
6	0.08807164	0.19782304
7	0.11449313	0.31231617
8	0.13023593	0.44255211
9	0.131683	0.57423511
10	0.11983153	0.69406664
11	0.09913336	0.79319999
12	0.07517613	0.86837612
13	0.05262329	0.92099941
14	0.03420514	0.95520455
15	0.02075112	0.97595567
16	0.0118022	0.98775787
17	0.00631765	0.99407551
18	0.00319392	0.99726944
19	0.00152972	0.99879916
20	0.00069602	0.99949518
21	0.00030161	0.99979679
22	0.00012476	0.99992155
23	0.00004936	0.99997091
24	0.00001872	0.99998962
25	0.00000681	0.99999643
26	0.00000238	0.99999882
27	8e-7	0.99999962
28	2.6e-7	0.99999988
29	8e-8	0.99999996
30	2e-8	0.99999999
31	1e-8	1
32	0	1
...
P(9.1)		
$\mu = 9.1$		
$\sigma = 3.017$		

P(9.2)		
k =	p(X=k) =	p(X≤k) =
0	0.00010104	0.00010104
1	0.00092956	0.0010306
2	0.00427599	0.00530659
3	0.01311303	0.01841962

4	0.03015997	0.04857958
5	0.05549434	0.10407392
6	0.08509131	0.18916523
7	0.1118343	0.30099953
8	0.12860944	0.42960898
9	0.13146743	0.56107641
10	0.12095004	0.68202645
11	0.10115821	0.78318466
12	0.07755463	0.86073929
13	0.05488482	0.9156241
14	0.03606716	0.95169127
15	0.02212119	0.97381246
16	0.01271969	0.98653215
17	0.0068836	0.99341574
18	0.00351828	0.99693403
19	0.00170359	0.99863762
20	0.00078365	0.99942127
21	0.00034331	0.99976458
22	0.00014357	0.99990815
23	0.00005743	0.99996558
24	0.00002201	0.99998759
25	0.0000081	0.99999569
26	0.00000287	0.99999856
27	9.8e-7	0.99999953
28	3.2e-7	0.99999985
29	1e-7	0.99999996
30	3e-8	0.99999999
31	1e-8	1
32	0	1
...
P(9.2)		
$\mu = 9.2$		
$\sigma = 3.033$		

P(9.25)		
k =	p(X=k) =	p(X≤k) =
0	0.00009611	0.00009611
1	0.00088903	0.00098514
2	0.00411178	0.00509692
3	0.01267798	0.0177749
4	0.02931782	0.04709272
5	0.05423797	0.1013307
6	0.08361688	0.18494757
7	0.11049373	0.2954413
8	0.12775838	0.42319968
9	0.13130722	0.5545069

10	0.12145918	0.67596608
11	0.10213613	0.7781022
12	0.07872993	0.85683213
13	0.05601937	0.91285151
14	0.0370128	0.94986431
15	0.02282456	0.97268887
16	0.01319545	0.98588432
17	0.00717988	0.9930642
18	0.00368966	0.99675385
19	0.00179628	0.99855014
20	0.00083078	0.99938092
21	0.00036594	0.99974685
22	0.00015386	0.99990071
23	0.00006188	0.99996259
24	0.00002385	0.99998644
25	0.00000882	0.99999527
26	0.00000314	0.99999841
27	0.00000108	0.99999948
28	3.6e-7	0.99999984
29	1.1e-7	0.99999995
30	3e-8	0.99999999
31	1e-8	1
32	0	1
...
P(9.25)		
$\mu = 9.25$		
$\sigma = 3.041$		

P(9.3)		
k =	p(X=k) =	p(X≤k) =
0	0.00009142	0.00009142
1	0.00085025	0.00094167
2	0.00395364	0.00489531
3	0.01225629	0.0171516
4	0.02849587	0.04564746
5	0.05300231	0.09864978
6	0.08215358	0.18080336
7	0.1091469	0.28995026
8	0.12688328	0.41683354
9	0.13111272	0.54794626
10	0.12193483	0.66988109
11	0.10309035	0.77297144
12	0.07989502	0.85286647
13	0.05715567	0.91002214
14	0.0379677	0.94798983
15	0.02353997	0.97152981

16	0.01368261	0.98521241
17	0.00748519	0.99269761
18	0.00386735	0.99656496
19	0.00189297	0.99845792
20	0.00088023	0.99933815
21	0.00038982	0.99972797
22	0.00016479	0.99989275
23	0.00006663	0.99995938
24	0.00002582	0.9999852
25	0.0000096	0.99999481
26	0.00000344	0.99999824
27	0.00000118	0.99999943
28	3.9e-7	0.99999982
29	1.3e-7	0.99999994
30	4e-8	0.99999998
31	1e-8	1
32	0	1
...
P(9.3)		
$\mu = 9.3$		
$\sigma = 3.05$		

P(9.4)		
k =	p(X=k) =	p(X≤k) =
0	0.00008272	0.00008272
1	0.00077761	0.00086033
2	0.00365475	0.00451508
3	0.01145155	0.01596663
4	0.02691114	0.04287776
5	0.05059294	0.0934707
6	0.07926227	0.17273297
7	0.1064379	0.27917087
8	0.12506454	0.40423541
9	0.13062296	0.53485837
10	0.12278558	0.65764395
11	0.10492586	0.76256981
12	0.08219192	0.84476173
13	0.05943108	0.90419282
14	0.03990373	0.94409655
15	0.02500634	0.96910288
16	0.01469122	0.9837941
17	0.00812338	0.99191749
18	0.00424221	0.9961597
19	0.00209878	0.99825847
20	0.00098643	0.9992449
21	0.00044154	0.99968644

22	0.00018866	0.9998751
23	0.0000771	0.99995221
24	0.0000302	0.99998241
25	0.00001135	0.99999376
26	0.00000411	0.99999787
27	0.00000143	0.9999993
28	4.8e-7	0.99999977
29	1.6e-7	0.99999993
30	5e-8	0.99999998
31	1e-8	0.99999999
32	0	1
...
P(9.4)		
$\mu = 9.4$		
$\sigma = 3.066$		

P(9.5)		
k =	p(X=k) =	p(X≤k) =
0	0.00007485	0.00007485
1	0.00071109	0.00078594
2	0.00337769	0.00416363
3	0.01069601	0.01485965
4	0.02540303	0.04026268
5	0.04826577	0.08852845
6	0.0764208	0.16494924
7	0.10371394	0.26866318
8	0.1231603	0.39182348
9	0.13000254	0.52182602
10	0.12350241	0.64532843
11	0.10666117	0.75198961
12	0.0844401	0.83642971
13	0.06170622	0.89813593
14	0.04187208	0.94000801
15	0.02651898	0.966527
16	0.01574565	0.98227264
17	0.00879904	0.99107168
18	0.00464394	0.99571562
19	0.00232197	0.99803759
20	0.00110293	0.99914052
21	0.00049895	0.99963947
22	0.00021545	0.99985492
23	0.00008899	0.99994391
24	0.00003523	0.99997914
25	0.00001339	0.99999253
26	0.00000489	0.99999742
27	0.00000172	0.99999914

28	5.8e-7	0.99999972
29	1.9e-7	0.99999991
30	6e-8	0.99999997
31	2e-8	0.99999999
32	1e-8	1
33	0	1
...
P(9.5)		
$\mu = 9.5$		
$\sigma = 3.082$		

P(9.6)		
k =	p(X=k) =	p(X≤k) =
0	0.00006773	0.00006773
1	0.0006502	0.00071792
2	0.00312094	0.00383886
3	0.00998701	0.01382587
4	0.02396882	0.03779469
5	0.04602014	0.08381483
6	0.07363222	0.15744705
7	0.10098133	0.25842837
8	0.12117759	0.37960596
9	0.1292561	0.50886206
10	0.12408585	0.63294791
11	0.10829311	0.74124102
12	0.08663449	0.82787551
13	0.06397624	0.89185174
14	0.04386942	0.93572116
15	0.02807643	0.96379759
16	0.01684586	0.98064345
17	0.00951295	0.9901564
18	0.00507358	0.99522998
19	0.00256349	0.99779347
20	0.00123048	0.99902395
21	0.0005625	0.99958645
22	0.00024546	0.9998319
23	0.00010245	0.99993436
24	0.00004098	0.99997534
25	0.00001574	0.99999107
26	0.00000581	0.99999688
27	0.00000207	0.99999895
28	7.1e-7	0.99999966
29	2.3e-7	0.99999989
30	8e-8	0.99999997
31	2e-8	0.99999999
32	1e-8	1

33	0	1
...
P(9.6)		
$\mu = 9.6$		
$\sigma = 3.098$		

P(9.7)		
k =	p(X=k) =	p(X≤k) =
0	0.00006128	0.00006128
1	0.00059445	0.00065573
2	0.00288308	0.00353882
3	0.00932197	0.01286078
4	0.02260577	0.03546655
5	0.04385519	0.07932173
6	0.07089922	0.15022095
7	0.09824606	0.248467
8	0.11912334	0.36759035
9	0.12838849	0.49597884
10	0.12453684	0.62051568
11	0.10981885	0.73033453
12	0.08877024	0.81910476
13	0.06623625	0.88534102
14	0.04589226	0.93123328
15	0.029677	0.96091027
16	0.01799168	0.97890195
17	0.01026584	0.98916779
18	0.00553215	0.99469994
19	0.00282431	0.99752424
20	0.00136979	0.99889403
21	0.00063271	0.99952675
22	0.00027897	0.99980571
23	0.00011765	0.99992337
24	0.00004755	0.99997092
25	0.00001845	0.99998937
26	0.00000688	0.99999625
27	0.00000247	0.99999872
28	8.6e-7	0.99999958
29	2.9e-7	0.99999987
30	9e-8	0.99999996
31	3e-8	0.99999999
32	1e-8	1
33	0	1
...
P(9.7)		
$\mu = 9.7$		
$\sigma = 3.114$		

P(9.75)		
k =	p(X=k) =	p(X≤k) =
0	0.00005829	0.00005829
1	0.00056837	0.00062667
2	0.00277082	0.00339749
3	0.00900516	0.01240265
4	0.02195008	0.03435272
5	0.04280265	0.07715537
6	0.0695543	0.14670967
7	0.09687921	0.24358888
8	0.11807153	0.36166041
9	0.12791083	0.48957124
10	0.12471306	0.6142843
11	0.11054112	0.72482542
12	0.08981466	0.81464007
13	0.06736099	0.88200107
14	0.04691212	0.92891319
15	0.03049288	0.95940607
16	0.0185816	0.97798767
17	0.01065709	0.98864476
18	0.00577259	0.99441735
19	0.00296225	0.9973796
20	0.0014441	0.9988237
21	0.00067047	0.99949417
22	0.00029714	0.99979132
23	0.00012596	0.99991728
24	0.00005117	0.99996845
25	0.00001996	0.99998841
26	0.00000748	0.99999589
27	0.0000027	0.99999859
28	9.4e-7	0.99999953
29	3.2e-7	0.99999985
30	1e-7	0.99999995
31	3e-8	0.99999999
32	1e-8	1
33	0	1
...
P(9.75)		
$\mu = 9.75$		
$\sigma = 3.122$		

P(9.8)		
k =	p(X=k) =	p(X≤k) =
0	0.00005545	0.00005545
1	0.00054343	0.00059888
2	0.00266279	0.00326166

3	0.00869843	0.0119601
4	0.02131116	0.03327126
5	0.04176988	0.07504114
6	0.06822413	0.14326527
7	0.09551379	0.23877906
8	0.11700439	0.35578345
9	0.12740478	0.48318823
10	0.12485669	0.60804492
11	0.11123596	0.71928087
12	0.0908427	0.81012357
13	0.06848142	0.87860499
14	0.04793699	0.92654198
15	0.03131884	0.95786082
16	0.01918279	0.9770436
17	0.01105831	0.98810192
18	0.00602064	0.99412255
19	0.00310538	0.99722793
20	0.00152164	0.99874957
21	0.0007101	0.99945967
22	0.00031632	0.99977598
23	0.00013478	0.99991076
24	0.00005503	0.9999658
25	0.00002157	0.99998737
26	0.00000813	0.9999955
27	0.00000295	0.99999845
28	0.00000103	0.99999949
29	3.5e-7	0.99999983
30	1.1e-7	0.99999995
31	4e-8	0.99999998
32	1e-8	1
33	0	1
...

P(9.8)
$\mu = 9.8$
$\sigma = 3.13$

P(9.9)		
k =	p(X=k) =	p(X≤k) =
0	0.00005017	0.00005017
1	0.00049673	0.0005469
2	0.00245881	0.00300571
3	0.00811407	0.01111979
4	0.02008233	0.03120212
5	0.03976302	0.07096514
6	0.06560898	0.13657412
7	0.09278985	0.22936397

8	0.11482743	0.3441914
9	0.12631018	0.47050158
10	0.12504708	0.59554866
11	0.11254237	0.70809103
12	0.09284745	0.80093848
13	0.07070691	0.87164539
14	0.04999988	0.92164527
15	0.03299992	0.9546452
16	0.0204187	0.9750639
17	0.01189089	0.98695479
18	0.00653999	0.99349478
19	0.00340768	0.99690246
20	0.0016868	0.99858926
21	0.00079521	0.99938447
22	0.00035784	0.99974231
23	0.00015403	0.99989634
24	0.00006354	0.99995988
25	0.00002516	0.99998504
26	0.00000958	0.99999462
27	0.00000351	0.99999813
28	0.00000124	0.99999937
29	4.2e-7	0.9999998
30	1.4e-7	0.99999994
31	4e-8	0.99999998
32	1e-8	0.99999999
33	0	1
...

P(9.9)
$\mu = 9.9$
$\sigma = 3.146$

P(10)		
k =	p(X=k) =	p(X≤k) =
0	0.0000454	0.0000454
1	0.000454	0.0004994
2	0.00227	0.0027694
3	0.00756665	0.01033605
4	0.01891664	0.02925269
5	0.03783327	0.06708596
6	0.06305546	0.13014142
7	0.09007923	0.22022065
8	0.11259903	0.33281968
9	0.12511004	0.45792971
10	0.12511004	0.58303975
11	0.1137364	0.69677615
12	0.09478033	0.79155648

13	0.07290795	0.86446442
14	0.0520771	0.91654153
15	0.03471807	0.9512596
16	0.02169879	0.97295839
17	0.012764	0.98572239
18	0.00709111	0.9928135
19	0.00373216	0.99654566
20	0.00186608	0.99841174
21	0.00088861	0.99930035
22	0.00040391	0.99970426
23	0.00017561	0.99987988
24	0.00007317	0.99995305
25	0.00002927	0.99998232
26	0.00001126	0.99999358
27	0.00000417	0.99999775
28	0.00000149	0.99999924
29	5.1e-7	0.99999975
30	1.7e-7	0.99999992
31	6e-8	0.99999998
32	2e-8	0.99999999
33	1e-8	1
34	0	1
...
P(10)		
$\mu = 10$		
$\sigma = 3.162$		