

# Mathematik > Wahrscheinlichkeitstabeln > Poissonverteilung

## Wahrscheinlichkeitstafel: Poissonverteilung P(5) bis P(6)

Parameter  $\lambda = 5, 5.1, 5.2, 5.25, 5.3, 5.4, 5.5, 5.6, 5.7, 5.75, 5.8, 5.9, 6$  als erwartete Ereignishäufigkeit, Zufallsvariable  $X$  als bestimmte Anzahl  $k$  des Auftretens eines Ereignisses  $E$  mit  $p(X=k)$ ,  $p(X \leq k)$  (kumuliert), Erwartungswert  $\mu$ , Standardabweichung  $\sigma$

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)		
$\mu = 5$		
$\sigma = 2.236$		

P(5.1)		
k =	p(X=k) =	p(X≤k) =
0	0.00609675	0.00609675
1	0.03109341	0.03719015
2	0.07928819	0.11647834
3	0.13478992	0.25126826
4	0.17185715	0.42312541
5	0.17529429	0.59841971

6	0.14900015	0.74741986
7	0.10855725	0.85597711
8	0.06920525	0.92518236
9	0.03921631	0.96439866
10	0.02000032	0.98439898
11	0.00927287	0.99367185
12	0.00394097	0.99761282
13	0.00154607	0.9991589
14	0.00056321	0.99972211
15	0.00019149	0.9999136
16	0.00006104	0.99997464
17	0.00001831	0.99999295
18	0.00000519	0.99999814
19	0.00000139	0.99999953
20	3.6e-7	0.99999989
21	9e-8	0.99999997
22	2e-8	0.99999999
23	0	1
...	...	...
<b>P(5.1)</b>		
$\mu = 5.1$		
$\sigma = 2.258$		

<b>P(5.2)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00551656	0.00551656
1	0.02868613	0.0342027
2	0.07458395	0.10878665
3	0.12927885	0.2380655
4	0.1680625	0.406128
5	0.174785	0.580913
6	0.15148034	0.73239334
7	0.11252825	0.84492159
8	0.07314336	0.91806495
9	0.04226061	0.96032556
10	0.02197552	0.98230108
11	0.01038843	0.9926895
12	0.00450165	0.99719116
13	0.00180066	0.99899182
14	0.00066882	0.99966063
15	0.00023186	0.99989249
16	0.00007535	0.99996784
17	0.00002305	0.99999089
18	0.00000666	0.99999755
19	0.00000182	0.99999937
20	4.7e-7	0.99999985

21	1.2e-7	0.99999996
22	3e-8	0.99999999
23	1e-8	1
24	0	1
...	...	...
<b>P(5.2)</b>		
$\mu = 5.2$		
$\sigma = 2.28$		

<b>P(5.25)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00524752	0.00524752
1	0.02754947	0.03279699
2	0.07231736	0.10511435
3	0.12655539	0.23166974
4	0.16610394	0.39777368
5	0.17440914	0.57218282
6	0.152608	0.72479082
7	0.114456	0.83924682
8	0.07511175	0.91435857
9	0.04381519	0.95817375
10	0.02300297	0.98117673
11	0.01097869	0.99215542
12	0.00480318	0.9969586
13	0.00193974	0.99889834
14	0.0007274	0.99962574
15	0.00025459	0.99988034
16	0.00008354	0.99996387
17	0.0000258	0.99998967
18	0.00000752	0.9999972
19	0.00000208	0.99999928
20	5.5e-7	0.99999982
21	1.4e-7	0.99999996
22	3e-8	0.99999999
23	1e-8	1
24	0	1
...	...	...
<b>P(5.25)</b>		
$\mu = 5.25$		
$\sigma = 2.291$		

<b>P(5.3)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00499159	0.00499159
1	0.02645545	0.03144704

2	0.07010694	0.10155398
3	0.12385559	0.22540957
4	0.16410865	0.38951822
5	0.17395517	0.56347339
6	0.1536604	0.7171338
7	0.11634288	0.83347667
8	0.07707716	0.91055383
9	0.04538988	0.95594371
10	0.02405664	0.98000034
11	0.01159092	0.99159127
12	0.00511933	0.99671059
13	0.00208711	0.9987977
14	0.00079012	0.99958782
15	0.00027918	0.999867
16	0.00009248	0.99995948
17	0.00002883	0.99998831
18	0.00000849	0.9999968
19	0.00000237	0.99999916
20	6.3e-7	0.99999979
21	1.6e-7	0.99999995
22	4e-8	0.99999999
23	1e-8	1
24	0	1
...	...	...
<b>P(5.3)</b>		
$\mu = 5.3$		
$\sigma = 2.302$		

<b>P(5.4)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00451658	0.00451658
1	0.02438954	0.02890612
2	0.06585175	0.09475787
3	0.11853315	0.21329102
4	0.16001975	0.37331077
5	0.17282133	0.5461321
6	0.1555392	0.7016713
7	0.11998738	0.82165869
8	0.08099148	0.90265017
9	0.04859489	0.95124506
10	0.02624124	0.9774863
11	0.01288206	0.99036836
12	0.00579693	0.99616529
13	0.00240795	0.99857325
14	0.00092878	0.99950203
15	0.00033436	0.99983639

16	0.00011285	0.99994924
17	0.00003585	0.99998508
18	0.00001075	0.99999584
19	0.00000306	0.99999889
20	8.3e-7	0.99999972
21	2.1e-7	0.99999993
22	5e-8	0.99999998
23	1e-8	1
24	0	1
...	...	...
<b>P(5.4)</b>		
$\mu = 5.4$		
$\sigma = 2.324$		

<b>P(5.5)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00408677	0.00408677
1	0.02247724	0.02656401
2	0.06181242	0.08837643
3	0.11332277	0.2016992
4	0.1558188	0.357518
5	0.17140068	0.52891869
6	0.15711729	0.68603598
7	0.1234493	0.80948528
8	0.0848714	0.89435668
9	0.05186585	0.94622253
10	0.02852622	0.97474875
11	0.01426311	0.98901186
12	0.00653726	0.99554912
13	0.00276576	0.99831488
14	0.00108655	0.99940143
15	0.0003984	0.99979983
16	0.00013695	0.99993678
17	0.00004431	0.99998109
18	0.00001354	0.99999463
19	0.00000392	0.99999855
20	0.00000108	0.99999963
21	2.8e-7	0.99999991
22	7e-8	0.99999998
23	2e-8	1
24	0	1
...	...	...
<b>P(5.5)</b>		
$\mu = 5.5$		
$\sigma = 2.345$		

P(5.6)		
k =	p(X=k) =	p(X≤k) =
0	0.00369786	0.00369786
1	0.02070804	0.0244059
2	0.0579825	0.0823884
3	0.10823401	0.19062241
4	0.15152761	0.34215002
5	0.16971092	0.51186094
6	0.15839686	0.6702578
7	0.12671749	0.79697529
8	0.08870224	0.88567753
9	0.05519251	0.94087003
10	0.0309078	0.97177784
11	0.01573488	0.98751272
12	0.00734294	0.99485566
13	0.00316311	0.99801878
14	0.00126525	0.99928402
15	0.00047236	0.99975638
16	0.00016533	0.99992171
17	0.00005446	0.99997617
18	0.00001694	0.99999311
19	0.00000499	0.9999981
20	0.0000014	0.9999995
21	3.7e-7	0.99999988
22	9e-8	0.99999997
23	2e-8	0.99999999
24	1e-8	1
25	0	1
...	...	...
P(5.6)		
$\mu = 5.6$		
$\sigma = 2.366$		

P(5.7)		
k =	p(X=k) =	p(X≤k) =
0	0.00334597	0.00334597
1	0.019072	0.02241797
2	0.05435521	0.07677318
3	0.1032749	0.18004807
4	0.14716673	0.3272148
5	0.16777007	0.49498487
6	0.15938157	0.65436644
7	0.12978213	0.78414857
8	0.09246977	0.87661834
9	0.05856419	0.93518253
10	0.03338159	0.96856411

11	0.01729773	0.98586185
12	0.00821642	0.99407827
13	0.00360259	0.99768085
14	0.00146677	0.99914762
15	0.00055737	0.99970499
16	0.00019856	0.99990356
17	0.00006658	0.99997013
18	0.00002108	0.99999122
19	0.00000632	0.99999754
20	0.0000018	0.99999934
21	4.9e-7	0.99999983
22	1.3e-7	0.99999996
23	3e-8	0.99999999
24	1e-8	1
25	0	1
...	...	...
<b>P(5.7)</b>		
$\mu = 5.7$		
$\sigma = 2.387$		

<b>P(5.75)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00318278	0.00318278
1	0.01830099	0.02148377
2	0.05261535	0.07409912
3	0.10084608	0.17494519
4	0.14496624	0.31991143
5	0.16671117	0.4866226
6	0.15976487	0.64638748
7	0.13123543	0.77762291
8	0.09432547	0.87194838
9	0.06026349	0.93221187
10	0.03465151	0.96686338
11	0.01811329	0.98497667
12	0.00867928	0.99365595
13	0.00383891	0.99749486
14	0.0015767	0.99907156
15	0.0006044	0.99967596
16	0.00021721	0.99989317
17	0.00007347	0.99996663
18	0.00002347	0.9999901
19	0.0000071	0.9999972
20	0.00000204	0.99999925
21	5.6e-7	0.99999981
22	1.5e-7	0.99999995
23	4e-8	0.99999999

24	1e-8	1
25	0	1
...	...	...
<b>P(5.75)</b>		
$\mu = 5.75$		
$\sigma = 2.398$		

<b>P(5.8)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00302755	0.00302755
1	0.01755982	0.02058737
2	0.05092347	0.07151084
3	0.09845204	0.16996289
4	0.14275546	0.31271835
5	0.16559634	0.47831469
6	0.16007646	0.63839115
7	0.13263478	0.77102593
8	0.09616022	0.86718614
9	0.06196992	0.92915606
10	0.03594255	0.96509861
11	0.01895153	0.98405014
12	0.0091599	0.99321004
13	0.00408673	0.99729677
14	0.00169307	0.99898984
15	0.00065465	0.9996445
16	0.00023731	0.99988181
17	0.00008097	0.99996278
18	0.00002609	0.99998886
19	0.00000796	0.99999683
20	0.00000231	0.99999914
21	6.4e-7	0.99999978
22	1.7e-7	0.99999994
23	4e-8	0.99999999
24	1e-8	1
25	0	1
...	...	...
<b>P(5.8)</b>		
$\mu = 5.8$		
$\sigma = 2.408$		

<b>P(5.9)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00273944	0.00273944
1	0.01616272	0.01890217
2	0.04768004	0.06658221



3	0.09377074	0.16035295
4	0.13831184	0.29866479
5	0.16320797	0.46187276
6	0.16048784	0.6223606
7	0.13526832	0.75762892
8	0.09976039	0.85738931
9	0.06539848	0.92278778
10	0.0385851	0.96137288
11	0.02069565	0.98206853
12	0.01017536	0.99224389
13	0.00461805	0.99686194
14	0.00194618	0.99880811
15	0.0007655	0.99957361
16	0.00028228	0.99985589
17	0.00009797	0.99995385
18	0.00003211	0.99998596
19	0.00000997	0.99999594
20	0.00000294	0.99999888
21	8.3e-7	0.9999997
22	2.2e-7	0.99999992
23	6e-8	0.99999998
24	1e-8	1
25	0	1
...	...	...
<b>P(5.9)</b>		
$\mu = 5.9$		
$\sigma = 2.429$		

<b>P(6)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.00247875	0.00247875
1	0.01487251	0.01735127
2	0.04461754	0.0619688
3	0.08923508	0.15120388
4	0.13385262	0.2850565
5	0.16062314	0.44567964
6	0.16062314	0.60630278
7	0.13767698	0.74397976
8	0.10325773	0.84723749
9	0.06883849	0.91607598
10	0.04130309	0.95737908
11	0.02252896	0.97990804
12	0.01126448	0.99117252
13	0.00519899	0.99637151
14	0.00222814	0.99859965
15	0.00089126	0.9994909

16	0.00033422	0.99982512
17	0.00011796	0.99994308
18	0.00003932	0.9999824
19	0.00001242	0.99999482
20	0.00000373	0.99999854
21	0.00000106	0.99999961
22	2.9e-7	0.9999999
23	8e-8	0.99999998
24	2e-8	0.99999999
25	0	1
...	...	...
<b>P(6)</b>		
$\mu = 6$		
$\sigma = 2.449$		

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