

# Mathematik > Wahrscheinlichkeitstafeln > Poissonverteilung

## Wahrscheinlichkeitstafel: Poissonverteilung P(2) bis P(3)

Parameter  $\lambda = 2, 2.1, 2.2, 2.25, 2.3, 2.4, 2.5, 2.6, 2.7, 2.75, 2.8, 2.9, 3$  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(2)		
k =	p(X=k) =	p(X≤k) =
0	0.13533528	0.13533528
1	0.27067057	0.40600585
2	0.27067057	0.67667642
3	0.18044704	0.85712346
4	0.09022352	0.94734698
5	0.03608941	0.98343639
6	0.0120298	0.99546619
7	0.00343709	0.99890328
8	0.00085927	0.99976255
9	0.00019095	0.9999535
10	0.00003819	0.99999169
11	0.00000694	0.99999864
12	0.00000116	0.99999979
13	1.8e-7	0.99999997
14	3e-8	1
15	0	1
...	...	...

  

P(2)		
$\mu = 2$		
$\sigma = 1.414$		

P(2.1)		
k =	p(X=k) =	p(X≤k) =
0	0.12245643	0.12245643
1	0.2571585	0.37961493
2	0.27001642	0.64963135
3	0.1890115	0.83864285
4	0.09923104	0.93787388
5	0.04167704	0.97955092
6	0.01458696	0.99413788
7	0.00437609	0.99851397
8	0.00114872	0.99966269
9	0.00026804	0.99993073
10	0.00005629	0.99998702
11	0.00001075	0.99999776
12	0.00000188	0.99999964
13	3e-7	0.99999995

14	5e-8	0.99999999
15	1e-8	1
16	0	1
...	...	...
<b>P(2.1)</b>		
$\mu = 2.1$		
$\sigma = 1.449$		

<b>P(2.2)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.11080316	0.11080316
1	0.24376695	0.35457011
2	0.26814364	0.62271375
3	0.19663867	0.81935242
4	0.10815127	0.92750369
5	0.04758656	0.97509025
6	0.0174484	0.99253865
7	0.00548378	0.99802244
8	0.00150804	0.99953048
9	0.00036863	0.99989911
10	0.0000811	0.99998021
11	0.00001622	0.99999643
12	0.00000297	0.9999994
13	5e-7	0.99999991
14	8e-8	0.99999999
15	1e-8	1
16	0	1
...	...	...
<b>P(2.2)</b>		
$\mu = 2.2$		
$\sigma = 1.483$		

<b>P(2.25)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.10539922	0.10539922
1	0.23714826	0.34254748
2	0.26679179	0.60933927
3	0.20009384	0.80943311
4	0.11255279	0.92198589
5	0.05064875	0.97263465
6	0.01899328	0.99162793
7	0.00610498	0.99773291
8	0.00171703	0.99944994
9	0.00042926	0.9998792
10	0.00009658	0.99997578

11	0.00001976	0.99999553
12	0.0000037	0.99999924
13	6.4e-7	0.99999988
14	1e-7	0.99999998
15	2e-8	1
16	0	1
...	...	...
<b>P(2.25)</b>		
$\mu = 2.25$		
$\sigma = 1.5$		

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<b>P(2.3)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.10025884	0.10025884
1	0.23059534	0.33085418
2	0.26518464	0.59603883
3	0.20330823	0.79934705
4	0.11690223	0.91624928
5	0.05377503	0.97002431
6	0.02061376	0.99063807
7	0.00677309	0.99741116
8	0.00194726	0.99935842
9	0.00049763	0.99985606
10	0.00011446	0.99997051
11	0.00002393	0.99999444
12	0.00000459	0.99999903
13	8.1e-7	0.99999984
14	1.3e-7	0.99999998
15	2e-8	1
16	0	1
...	...	...
<b>P(2.3)</b>		
$\mu = 2.3$		
$\sigma = 1.517$		

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<b>P(2.4)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.09071795	0.09071795
1	0.21772309	0.30844104
2	0.26126771	0.56970875
3	0.20901416	0.77872291
4	0.1254085	0.90413141
5	0.06019608	0.96432749
6	0.02407843	0.98840592
7	0.00825546	0.99666138

8	0.00247664	0.99913802
9	0.00066044	0.99979846
10	0.0001585	0.99995696
11	0.00003458	0.99999155
12	0.00000692	0.99999846
13	0.00000128	0.99999974
14	2.2e-7	0.99999996
15	4e-8	0.99999999
16	1e-8	1
17	0	1
...	...	...
<b>P(2.4)</b>		
$\mu = 2.4$		
$\sigma = 1.549$		

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<b>P(2.5)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.082085	0.082085
1	0.2052125	0.2872975
2	0.25651562	0.54381312
3	0.21376302	0.75757613
4	0.13360189	0.89117802
5	0.06680094	0.95797896
6	0.02783373	0.98581269
7	0.00994062	0.9957533
8	0.00310644	0.99885975
9	0.0008629	0.99972265
10	0.00021573	0.99993837
11	0.00004903	0.9999874
12	0.00001021	0.99999762
13	0.00000196	0.99999958
14	3.5e-7	0.99999993
15	6e-8	0.99999999
16	1e-8	1
17	0	1
...	...	...
<b>P(2.5)</b>		
$\mu = 2.5$		
$\sigma = 1.581$		

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<b>P(2.6)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.07427358	0.07427358
1	0.1931113	0.26738488
2	0.25104469	0.51842958

3	0.21757207	0.73600164
4	0.14142184	0.87742349
5	0.07353936	0.95096285
6	0.03186706	0.9828299
7	0.01183633	0.99466624
8	0.00384681	0.99851305
9	0.0011113	0.99962435
10	0.00028894	0.99991329
11	0.00006829	0.99998158
12	0.0000148	0.99999638
13	0.00000296	0.99999934
14	5.5e-7	0.99999989
15	1e-7	0.99999998
16	2e-8	1
17	0	1
...	...	...
<b>P(2.6)</b>		
$\mu = 2.6$		
$\sigma = 1.612$		

<b>P(2.7)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.06720551	0.06720551
1	0.18145488	0.2486604
2	0.24496409	0.49362449
3	0.22046768	0.71409218
4	0.14881569	0.86290786
5	0.08036047	0.94326833
6	0.03616221	0.97943055
7	0.01394828	0.99337883
8	0.00470755	0.99808637
9	0.00141226	0.99949864
10	0.00038131	0.99987995
11	0.00009359	0.99997354
12	0.00002106	0.9999946
13	0.00000437	0.99999897
14	8.4e-7	0.99999982
15	1.5e-7	0.99999997
16	3e-8	1
17	0	1
...	...	...
<b>P(2.7)</b>		
$\mu = 2.7$		
$\sigma = 1.643$		

P(2.75)		
k =	p(X=k) =	p(X≤k) =
0	0.06392786	0.06392786
1	0.17580162	0.23972948
2	0.24172723	0.4814567
3	0.22158329	0.70303999
4	0.15233851	0.85537851
5	0.08378618	0.93916469
6	0.038402	0.97756669
7	0.0150865	0.99265319
8	0.00518598	0.99783917
9	0.00158461	0.99942378
10	0.00043577	0.99985954
11	0.00010894	0.99996849
12	0.00002497	0.99999345
13	0.00000528	0.99999873
14	0.00000104	0.99999977
15	1.9e-7	0.99999996
16	3e-8	0.99999999
17	1e-8	1
18	0	1
...	...	...
P(2.75)		
$\mu = 2.75$		
$\sigma = 1.658$		

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P(2.8)		
k =	p(X=k) =	p(X≤k) =
0	0.06081006	0.06081006
1	0.17026818	0.23107824
2	0.23837545	0.46945368
3	0.22248375	0.69193743
4	0.15573862	0.84767606
5	0.08721363	0.93488969
6	0.04069969	0.97558938
7	0.01627988	0.99186926
8	0.00569796	0.99756722
9	0.0017727	0.99933991
10	0.00049636	0.99983627
11	0.00012635	0.99996261
12	0.00002948	0.99999209
13	0.00000635	0.99999844
14	0.00000127	0.99999971
15	2.4e-7	0.99999995
16	4e-8	0.99999999
17	1e-8	1

18	0	1
...	...	...
<b>P(2.8)</b>		
$\mu = 2.8$		
$\sigma = 1.673$		

<b>P(2.9)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.05502322	0.05502322
1	0.15956734	0.21459056
2	0.23137264	0.4459632
3	0.22366022	0.66962342
4	0.16215366	0.83177708
5	0.09404912	0.9258262
6	0.04545708	0.97128327
7	0.01883222	0.99011549
8	0.00682668	0.99694217
9	0.00219971	0.99914188
10	0.00063792	0.99977979
11	0.00016818	0.99994797
12	0.00004064	0.99998861
13	0.00000907	0.99999768
14	0.00000188	0.99999956
15	3.6e-7	0.99999992
16	7e-8	0.99999999
17	1e-8	1
18	0	1
...	...	...
<b>P(2.9)</b>		
$\mu = 2.9$		
$\sigma = 1.703$		

<b>P(3)</b>		
<b>k =</b>	<b>p(X=k) =</b>	<b>p(X≤k) =</b>
0	0.04978707	0.04978707
1	0.14936121	0.19914827
2	0.22404181	0.42319008
3	0.22404181	0.64723189
4	0.16803136	0.81526324
5	0.10081881	0.91608206
6	0.05040941	0.96649146
7	0.02160403	0.9880955
8	0.00810151	0.99619701
9	0.0027005	0.99889751
10	0.00081015	0.99970766

11	0.00022095	0.99992861
12	0.00005524	0.99998385
13	0.00001275	0.9999966
14	0.00000273	0.99999933
15	5.5e-7	0.99999988
16	1e-7	0.99999998
17	2e-8	1
18	0	1
...	...	...
<b>P(3)</b>		
$\mu = 3$		
$\sigma = 1.732$		

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