

Wahrscheinlichkeitstafel: Geometrische Verteilung G(0.2)

Auf Grundlage der Zufallsvariablen X, die die Anzahl der Versuchswiederholungen eines Bernoulli-Experiments zählt, bis der Treffer T bei Trefferwahrscheinlichkeit  $p = 0.2$  auftritt mit  $p(X=k)$ ,  $p(X \leq k)$  (kumuliert), Erwartungswert  $\mu$ , Standardabweichung  $\sigma$

G(0.2)		
k =	$p(X=k) =$	$p(x \leq k) =$
1	0.2	0.2
2	0.16	0.36
3	0.128	0.488
4	0.1024	0.5904
5	0.08192	0.67232
6	0.065536	0.737856
7	0.0524288	0.7902848
8	0.04194304	0.83222784
9	0.03355443	0.86578227
10	0.02684355	0.89262582
11	0.02147484	0.91410065
12	0.01717987	0.93128052
13	0.0137439	0.94502442
14	0.01099512	0.95601953
15	0.00879609	0.96481563
16	0.00703687	0.9718525
17	0.0056295	0.977482
18	0.0045036	0.9819856
19	0.00360288	0.98558848
20	0.0028823	0.98847078
21	0.00230584	0.99077663
22	0.00184467	0.9926213
23	0.00147574	0.99409704
24	0.00118059	0.99527763
25	0.00094447	0.99622211
26	0.00075558	0.99697769
27	0.00060446	0.99758215
28	0.00048357	0.99806572
29	0.00038686	0.99845257
30	0.00030949	0.99876206
31	0.00024759	0.99900965
32	0.00019807	0.99920772
33	0.00015846	0.99936617
34	0.00012677	0.99949294
35	0.00010141	0.99959435
36	0.00008113	0.99967548
37	0.0000649	0.99974039
38	0.00005192	0.99979231

39	0.00004154	0.99983385
40	0.00003323	0.99986708
41	0.00002658	0.99989366
42	0.00002127	0.99991493
43	0.00001701	0.99993194
44	0.00001361	0.99994555
45	0.00001089	0.99995644
46	0.00000871	0.99996516
47	0.00000697	0.99997212
48	0.00000558	0.9999777
49	0.00000446	0.99998216
50	0.00000357	0.99998573
51	0.00000285	0.99998858
52	0.00000228	0.99999087
53	0.00000183	0.99999269
54	0.00000146	0.99999415
55	0.00000117	0.99999532
56	9.4e-7	0.99999626
57	7.5e-7	0.99999701
58	6e-7	0.99999761
59	4.8e-7	0.99999808
60	3.8e-7	0.99999847
61	3.1e-7	0.99999877
62	2.5e-7	0.99999902
63	2e-7	0.99999922
64	1.6e-7	0.99999937
65	1.3e-7	0.9999995
66	1e-7	0.9999996
67	8e-8	0.99999968
68	6e-8	0.99999974
69	5e-8	0.99999979
70	4e-8	0.99999984
71	3e-8	0.99999987
72	3e-8	0.99999989
73	2e-8	0.99999992
74	2e-8	0.99999993
75	1e-8	0.99999995
76	1e-8	0.99999996
77	1e-8	0.99999997
78	1e-8	0.99999997
79	1e-8	0.99999998
80	0	0.99999998
81	0	0.99999999
82	0	0.99999999
83	0	0.99999999
84	0	0.99999999
85	0	0.99999999

86	0	1
...	...	...
<b>G(0.2)</b>		
$\mu = 5$		
$\sigma = 4.472$		

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