

Wahrscheinlichkeitstafel: Binomialverteilung B(1, 0.8) bis B(100, 0.8) (Schrittweite 1)

1- bis 99-malig durchgeführtes Bernoulli-Experiment (T = Treffer, N = Nichttreffer) mit Trefferwahrscheinlichkeit  $p = 0.8$ , binomialverteilte Zufallsvariable  $X$  als Anzahl  $k$  des Auftretens von T mit  $p(X=k)$ ,  $p(X \leq k)$  (kumuliert), Erwartungswert  $\mu$ , Standardabweichung  $\sigma$ ,  $1\sigma$ -,  $2\sigma$ -,  $3\sigma$ -Intervalle

p = 0.8		n = 1
k	p(X=k)	p(x≤k)
0	0.2	0.2
1	0.8	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 1
Erwartungswert: $\mu = 0.8$		
Standardabweichung: $\sigma = 0.4$		
1σ-Intervall: $p(1 \leq X \leq 1) = 0.8$		
2σ-Intervall: $p(1 \leq X \leq 1) = 0.8$		
3σ-Intervall: $p(0 \leq X \leq 1) = 1$		

p = 0.8		n = 2
k	p(X=k)	p(x≤k)
0	0.04	0.04
1	0.32	0.36
2	0.64	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 2
Erwartungswert: $\mu = 1.6$		
Standardabweichung: $\sigma = 0.566$		
1σ-Intervall: $p(2 \leq X \leq 2) = 0.64$		
2σ-Intervall: $p(1 \leq X \leq 2) = 0.96$		
3σ-Intervall: $p(0 \leq X \leq 2) = 1$		

p = 0.8		n = 3
k	p(X=k)	p(x≤k)
0	0.008	0.008
1	0.096	0.104
2	0.384	0.488
3	0.512	1
k	p(X=k)	p(x≤k)

<b>p = 0.8</b>	<b>n = 3</b>
Erwartungswert: $\mu = 2.4$	
Standardabweichung: $\sigma = 0.693$	
1 $\sigma$ -Intervall: $p(2 \leq X \leq 3) = 0.896$	
2 $\sigma$ -Intervall: $p(2 \leq X \leq 3) = 0.896$	
3 $\sigma$ -Intervall: $p(1 \leq X \leq 3) = 0.992$	

p = 0.8		n = 4
k	p(X=k)	p(x≤k)
0	0.0016	0.0016
1	0.0256	0.0272
2	0.1536	0.1808
3	0.4096	0.5904
4	0.4096	1
k	p(X=k)	p(x≤k)

<b>p = 0.8</b>	<b>n = 4</b>
Erwartungswert: $\mu = 3.2$	
Standardabweichung: $\sigma = 0.8$	
1 $\sigma$ -Intervall: $p(3 \leq X \leq 4) = 0.8192$	
2 $\sigma$ -Intervall: $p(2 \leq X \leq 4) = 0.9728$	
3 $\sigma$ -Intervall: $p(1 \leq X \leq 4) = 0.9984$	

p = 0.8		n = 5
k	p(X=k)	p(x≤k)
0	0.00032	0.00032
1	0.0064	0.00672
2	0.0512	0.05792
3	0.2048	0.26272
4	0.4096	0.67232
5	0.32768	1
k	p(X=k)	p(x≤k)

<b>p = 0.8</b>	<b>n = 5</b>
Erwartungswert: $\mu = 4$	
Standardabweichung: $\sigma = 0.894$	
1 $\sigma$ -Intervall: $p(4 \leq X \leq 5) = 0.4096$	
2 $\sigma$ -Intervall: $p(3 \leq X \leq 5) = 0.94208$	

3 $\sigma$ -Intervall:  
 $p(2 \leq X \leq 5) = 0.99328$

p = 0.8		n = 6
k	p(X=k)	p(x≤k)
0	0.000064	0.000064
1	0.001536	0.0016
2	0.01536	0.01696
3	0.08192	0.09888
4	0.24576	0.34464
5	0.393216	0.737856
6	0.262144	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 6
Erwartungswert: $\mu = 4.8$		
Standardabweichung: $\sigma = 0.98$		
1 $\sigma$ -Intervall: $p(4 \leq X \leq 5) = 0.638976$		
2 $\sigma$ -Intervall: $p(3 \leq X \leq 6) = 0.98304$		
3 $\sigma$ -Intervall: $p(2 \leq X \leq 6) = 0.9984$		

p = 0.8		n = 7
k	p(X=k)	p(x≤k)
0	0.0000128	0.0000128
1	0.0003584	0.0003712
2	0.0043008	0.004672
3	0.028672	0.033344
4	0.114688	0.148032
5	0.2752512	0.4232832
6	0.3670016	0.7902848
7	0.2097152	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 7
Erwartungswert: $\mu = 5.6$		
Standardabweichung: $\sigma = 1.058$		
1 $\sigma$ -Intervall: $p(5 \leq X \leq 6) = 0.6422528$		
2 $\sigma$ -Intervall: $p(4 \leq X \leq 7) = 0.966656$		
3 $\sigma$ -Intervall: $p(3 \leq X \leq 7) = 0.995328$		

p = 0.8		n = 8
k	p(X=k)	p(x≤k)
0	0.00000256	0.00000256
1	0.00008192	0.00008448
2	0.00114688	0.00123136
3	0.00917504	0.0104064
4	0.0458752	0.0562816
5	0.14680064	0.20308224
6	0.29360128	0.49668352
7	0.33554432	0.83222784
8	0.16777216	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 8
Erwartungswert: $\mu = 6.4$		
Standardabweichung: $\sigma = 1.131$		
1σ-Intervall: $p(6 \leq X \leq 7) = 0.6291456$		
2σ-Intervall: $p(5 \leq X \leq 8) = 0.9437184$		
3σ-Intervall: $p(4 \leq X \leq 8) = 0.9895936$		

---

p = 0.8		n = 9
k	p(X=k)	p(x≤k)
0	5.1e-7	5.1e-7
1	0.00001843	0.00001894
2	0.00029491	0.00031386
3	0.00275251	0.00306637
4	0.01651507	0.01958144
5	0.06606029	0.08564173
6	0.17616077	0.2618025
7	0.30198989	0.56379238
8	0.30198989	0.86578227
9	0.13421773	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 9
Erwartungswert: $\mu = 7.2$		
Standardabweichung: $\sigma = 1.2$		
1σ-Intervall: $p(6 \leq X \leq 8) = 0.78014054$		
2σ-Intervall: $p(5 \leq X \leq 9) = 0.98041856$		
3σ-Intervall: $p(4 \leq X \leq 9) = 0.99693363$		

---

p = 0.8		n = 10
k	p(X=k)	p(x≤k)
0	1e-7	1e-7
1	0.0000041	0.0000042
2	0.00007373	0.00007793
3	0.00078643	0.00086436
4	0.00550502	0.00636938
5	0.02642412	0.0327935
6	0.08808038	0.12087388
7	0.20132659	0.32220047
8	0.30198989	0.62419036
9	0.26843546	0.89262582
10	0.10737418	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 10
Erwartungswert: $\mu = 8$		
Standardabweichung: $\sigma = 1.265$		
1 $\sigma$ -Intervall: $p(7 \leq X \leq 9) = 0.77175194$		
2 $\sigma$ -Intervall: $p(6 \leq X \leq 10) = 0.9672065$		
3 $\sigma$ -Intervall: $p(5 \leq X \leq 10) = 0.99363062$		

---

p = 0.8		n = 11
k	p(X=k)	p(x≤k)
0	2e-8	2e-8
1	9e-7	9.2e-7
2	0.00001802	0.00001894
3	0.00021627	0.00023521
4	0.00173015	0.00196536
5	0.00968884	0.01165421
6	0.03875537	0.05040957
7	0.11072963	0.1611392
8	0.22145925	0.38259845
9	0.295279	0.67787745
10	0.2362232	0.91410065
11	0.08589935	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 11
Erwartungswert: $\mu = 8.8$		
Standardabweichung: $\sigma = 1.327$		
1 $\sigma$ -Intervall: $p(8 \leq X \leq 10) = 0.75296145$		
2 $\sigma$ -Intervall: $p(7 \leq X \leq 11) = 0.94959043$		

3 $\sigma$ -Intervall:  
 $p(5 \leq X \leq 11) = 0.99803464$

p = 0.8		n = 12
k	p(X=k)	p(x≤k)
0	0	0
1	2e-7	2e-7
2	0.00000433	0.00000453
3	0.00005767	0.0000622
4	0.00051905	0.00058124
5	0.00332189	0.00390313
6	0.01550215	0.01940528
7	0.05315022	0.0725555
8	0.13287555	0.20543105
9	0.2362232	0.44165425
10	0.28346784	0.72512209
11	0.20615843	0.93128052
12	0.06871948	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 12
Erwartungswert: $\mu = 9.6$		
Standardabweichung: $\sigma = 1.386$		
1 $\sigma$ -Intervall: $p(9 \leq X \leq 10) = 0.51969104$		
2 $\sigma$ -Intervall: $p(7 \leq X \leq 12) = 0.98059472$		
3 $\sigma$ -Intervall: $p(6 \leq X \leq 12) = 0.99609687$		

p = 0.8		n = 13
k	p(X=k)	p(x≤k)
0	0	0
1	4e-8	4e-8
2	0.00000102	0.00000107
3	0.00001499	0.00001606
4	0.00014995	0.00016601
5	0.00107961	0.00124562
6	0.00575794	0.00700356
7	0.02303176	0.03003532
8	0.06909529	0.09913061
9	0.15354508	0.25267569
10	0.24567213	0.49834782
11	0.26800596	0.76635378
12	0.17867064	0.94502442
13	0.05497558	1
k	p(X=k)	p(x≤k)

<b>p = 0.8</b>	<b>n = 13</b>
Erwartungswert: $\mu = 10.4$	
Standardabweichung: $\sigma = 1.442$	
1 $\sigma$ -Intervall: $p(9 \leq X \leq 11) = 0.66722317$	
2 $\sigma$ -Intervall: $p(8 \leq X \leq 13) = 0.96996468$	
3 $\sigma$ -Intervall: $p(7 \leq X \leq 13) = 0.99299644$	

p = 0.8		n = 14
k	p(X=k)	p(x≤k)
0	0	0
1	1e-8	1e-8
2	2.4e-7	2.5e-7
3	0.00000382	0.00000406
4	0.00004198	0.00004605
5	0.00033588	0.00038193
6	0.00201528	0.00239721
7	0.0092127	0.01160991
8	0.03224447	0.04385438
9	0.08598525	0.12983963
10	0.17197049	0.30181012
11	0.2501389	0.55194901
12	0.2501389	0.80208791
13	0.15393163	0.95601953
14	0.04398047	1
k	p(X=k)	p(x≤k)

<b>p = 0.8</b>	<b>n = 14</b>
Erwartungswert: $\mu = 11.2$	
Standardabweichung: $\sigma = 1.497$	
1 $\sigma$ -Intervall: $p(10 \leq X \leq 12) = 0.67224828$	
2 $\sigma$ -Intervall: $p(9 \leq X \leq 14) = 0.95614562$	
3 $\sigma$ -Intervall: $p(7 \leq X \leq 14) = 0.99760279$	

p = 0.8		n = 15
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	6e-8	6e-8
3	9.5e-7	0.00000101
4	0.00001145	0.00001246

5	0.00010076	0.00011323
6	0.00067176	0.00078499
7	0.00345476	0.00423975
8	0.01381906	0.01805881
9	0.04299262	0.06105143
10	0.10318229	0.16423372
11	0.18760417	0.3518379
12	0.2501389	0.60197679
13	0.23089744	0.83287423
14	0.1319414	0.96481563
15	0.03518437	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 15</b>
Erwartungswert: $\mu = 12$		
Standardabweichung: $\sigma = 1.549$		
1 $\sigma$ -Intervall: $p(11 \leq X \leq 13) = 0.66864051$		
2 $\sigma$ -Intervall: $p(9 \leq X \leq 15) = 0.98194119$		
3 $\sigma$ -Intervall: $p(8 \leq X \leq 15) = 0.99576025$		

---

<b>p = 0.8</b>		<b>n = 16</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	1e-8	1e-8
3	2.3e-7	2.5e-7
4	0.00000305	0.0000033
5	0.00002931	0.00003261
6	0.00021496	0.00024758
7	0.00122836	0.00147594
8	0.00552762	0.00700356
9	0.01965377	0.02665733
10	0.05503056	0.08168789
11	0.12006667	0.20175456
12	0.20011112	0.40186567
13	0.2462906	0.64815628
14	0.21110623	0.85926251
15	0.11258999	0.9718525
16	0.0281475	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 16</b>
Erwartungswert: $\mu = 12.8$		
Standardabweichung: $\sigma = 1.6$		



1 $\sigma$ -Intervall: $p(12 \leq X \leq 14) = 0.65750795$
2 $\sigma$ -Intervall: $p(10 \leq X \leq 16) = 0.97334267$
3 $\sigma$ -Intervall: $p(8 \leq X \leq 16) = 0.99852406$

p = 0.8		n = 17
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	6e-8	6e-8
4	8e-7	8.6e-7
5	0.00000831	0.00000916
6	0.00006644	0.00007561
7	0.00041764	0.00049325
8	0.00208821	0.00258146
9	0.00835285	0.01093432
10	0.02672913	0.03766344
11	0.06803778	0.10570122
12	0.13607556	0.24177678
13	0.20934701	0.4511238
14	0.23925373	0.69037753
15	0.19140298	0.88178051
16	0.09570149	0.977482
17	0.022518	1
k	p(X=k)	p(x≤k)
p = 0.8	n = 17	

Erwartungswert: $\mu = 13.6$
Standardabweichung: $\sigma = 1.649$
1 $\sigma$ -Intervall: $p(12 \leq X \leq 15) = 0.77607929$
2 $\sigma$ -Intervall: $p(11 \leq X \leq 16) = 0.93981856$
3 $\sigma$ -Intervall: $p(9 \leq X \leq 17) = 0.99741854$

p = 0.8		n = 18
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	1e-8	1e-8
4	2.1e-7	2.2e-7
5	0.0000023	0.00000252

6	0.00001993	0.00002245
7	0.00013668	0.00015914
8	0.00075176	0.00091089
9	0.00334114	0.00425203
10	0.01202811	0.01628014
11	0.03499086	0.051271
12	0.08164534	0.13291633
13	0.15072985	0.28364618
14	0.21532836	0.49897454
15	0.22968358	0.72865812
16	0.17226269	0.90092081
17	0.08106479	0.9819856
18	0.0180144	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 18</b>
Erwartungswert: $\mu = 14.4$		
Standardabweichung: $\sigma = 1.697$		
1 $\sigma$ -Intervall: $p(13 \leq X \leq 16) = 0.76800447$		
2 $\sigma$ -Intervall: $p(12 \leq X \leq 17) = 0.9307146$		
3 $\sigma$ -Intervall: $p(10 \leq X \leq 18) = 0.99574797$		

<b>p = 0.8</b>		<b>n = 19</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	5e-8	6e-8
5	6.2e-7	6.8e-7
6	0.00000583	0.00000651
7	0.00004328	0.00004979
8	0.0002597	0.00030949
9	0.00126963	0.00157912
10	0.00507853	0.00665765
11	0.01662066	0.02327831
12	0.04432175	0.06760007
13	0.09546224	0.1630623
14	0.16364955	0.32671186
15	0.2181994	0.54491126
16	0.2181994	0.76311066
17	0.15402311	0.91713377
18	0.06845471	0.98558848
19	0.01441152	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>

<b>p = 0.8</b>	<b>n = 19</b>
Erwartungswert: $\mu = 15.2$	
Standardabweichung: $\sigma = 1.744$	
1 $\sigma$ -Intervall: $p(14 \leq X \leq 16) = 0.60004836$	
2 $\sigma$ -Intervall: $p(12 \leq X \leq 18) = 0.96231017$	
3 $\sigma$ -Intervall: $p(10 \leq X \leq 19) = 0.99842088$	

	<b>p = 0.8</b>	<b>n = 20</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	1e-8	1e-8
5	1.7e-7	1.8e-7
6	0.00000166	0.00000185
7	0.00001332	0.00001516
8	0.00008657	0.00010173
9	0.00046168	0.00056341
10	0.00203141	0.00259483
11	0.00738696	0.00998179
12	0.02216088	0.03214266
13	0.05454985	0.08669251
14	0.1090997	0.19579221
15	0.17455952	0.37035174
16	0.2181994	0.58855114
17	0.20536414	0.79391528
18	0.13690943	0.93082471
19	0.05764608	0.98847078
20	0.01152922	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
	<b>p = 0.8</b>	<b>n = 20</b>

Erwartungswert: $\mu = 16$	
Standardabweichung: $\sigma = 1.789$	
1 $\sigma$ -Intervall: $p(15 \leq X \leq 17) = 0.59812307$	
2 $\sigma$ -Intervall: $p(13 \leq X \leq 19) = 0.95632812$	
3 $\sigma$ -Intervall: $p(11 \leq X \leq 20) = 0.99740517$	

p = 0.8		n = 21
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	4e-8	5e-8
6	4.7e-7	5.1e-7
7	0.000004	0.00000451
8	0.00002797	0.00003248
9	0.00016159	0.00019407
10	0.00077563	0.0009697
11	0.00310252	0.00407222
12	0.01034174	0.01441396
13	0.02863867	0.04305263
14	0.06545982	0.10851245
15	0.12219167	0.23070412
16	0.1832875	0.41399162
17	0.21563235	0.62962397
18	0.1916732	0.82129717
19	0.12105676	0.94235392
20	0.0484227	0.99077663
21	0.00922337	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 21
Erwartungswert: $\mu = 16.8$		
Standardabweichung: $\sigma = 1.833$		
1 $\sigma$ -Intervall: $p(15 \leq X \leq 18) = 0.71278471$		
2 $\sigma$ -Intervall: $p(14 \leq X \leq 20) = 0.94772399$		
3 $\sigma$ -Intervall: $p(12 \leq X \leq 21) = 0.99592778$		

p = 0.8		n = 22
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	1e-8	1e-8
6	1.3e-7	1.4e-7
7	0.00000117	0.00000131
8	0.00000879	0.0000101

9	0.00005469	0.00006479
10	0.0002844	0.00034919
11	0.00124101	0.0015902
12	0.00455037	0.00614057
13	0.01400113	0.0201417
14	0.0360029	0.0561446
15	0.07680619	0.13295079
16	0.13441083	0.26736162
17	0.18975647	0.45711809
18	0.21084052	0.66795861
19	0.17754991	0.84550852
20	0.10652995	0.95203847
21	0.04058284	0.9926213
22	0.0073787	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 22</b>
Erwartungswert: $\mu = 17.6$		
Standardabweichung: $\sigma = 1.876$		
1 $\sigma$ -Intervall: $p(16 \leq X \leq 19) = 0.71255773$		
2 $\sigma$ -Intervall: $p(14 \leq X \leq 21) = 0.97247961$		
3 $\sigma$ -Intervall: $p(12 \leq X \leq 22) = 0.9984098$		

<b>p = 0.8</b>		<b>n = 23</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	3e-8	4e-8
7	3.4e-7	3.7e-7
8	0.0000027	0.00000307
9	0.00001797	0.00002104
10	0.00010063	0.00012167
11	0.00047572	0.00059739
12	0.00190288	0.00250027
13	0.00644052	0.00894079
14	0.01840148	0.02734228
15	0.04416356	0.07150584
16	0.08832712	0.15983295
17	0.14547996	0.30531291
18	0.19397328	0.49928619

19	0.2041824	0.70346859
20	0.16334592	0.86681451
21	0.09334053	0.96015503
22	0.03394201	0.99409704
23	0.00590296	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 23
Erwartungswert: $\mu = 18.4$		
Standardabweichung: $\sigma = 1.918$		
1 $\sigma$ -Intervall: $p(17 \leq X \leq 20) = 0.70698155$		
2 $\sigma$ -Intervall: $p(15 \leq X \leq 22) = 0.96675477$		
3 $\sigma$ -Intervall: $p(13 \leq X \leq 23) = 0.99749973$		

p = 0.8		n = 24
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	1e-8	1e-8
7	1e-7	1.1e-7
8	8.1e-7	9.1e-7
9	0.00000575	0.00000666
10	0.0000345	0.00004117
11	0.00017565	0.00021682
12	0.00076115	0.00097797
13	0.00281041	0.00378838
14	0.00883271	0.01262109
15	0.0235539	0.03617499
16	0.05299627	0.08917126
17	0.09975769	0.18892894
18	0.15517862	0.34410757
19	0.1960151	0.54012267
20	0.1960151	0.73613777
21	0.14934484	0.88548261
22	0.08146082	0.96694343
23	0.0283342	0.99527763
24	0.00472237	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 24
Erwartungswert: $\mu = 19.2$		

Standardabweichung: $\sigma = 1.96$
1 $\sigma$ -Intervall: $p(18 \leq X \leq 21) = 0.69655367$
2 $\sigma$ -Intervall: $p(16 \leq X \leq 23) = 0.95910265$
3 $\sigma$ -Intervall: $p(14 \leq X \leq 24) = 0.99621162$

p = 0.8		n = 25
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	3e-8	3e-8
8	2.4e-7	2.7e-7
9	0.0000018	0.00000206
10	0.0000115	0.00001356
11	0.00006273	0.0000763
12	0.00029275	0.00036905
13	0.001171	0.00154005
14	0.00401487	0.00555492
15	0.01177695	0.01733187
16	0.02944237	0.04677424
17	0.06234855	0.1091228
18	0.11084187	0.21996467
19	0.16334592	0.38331059
20	0.1960151	0.57932569
21	0.18668105	0.76600674
22	0.13576804	0.90177478
23	0.0708355	0.97261027
24	0.02361183	0.99622211
25	0.00377789	1
k	p(X=k)	p(x≤k)
p = 0.8	n = 25	

Erwartungswert: $\mu = 20$
Standardabweichung: $\sigma = 2$
1 $\sigma$ -Intervall: $p(18 \leq X \leq 22) = 0.79265198$
2 $\sigma$ -Intervall: $p(16 \leq X \leq 24) = 0.97889024$
3 $\sigma$ -Intervall: $p(14 \leq X \leq 25) = 0.99845995$

p = 0.8		n = 26
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	1e-8	1e-8
8	7e-8	8e-8
9	5.5e-7	6.3e-7
10	0.00000374	0.00000436
11	0.00002175	0.00002611
12	0.00010874	0.00013485
13	0.0004684	0.00060325
14	0.00173978	0.00234303
15	0.00556729	0.00791031
16	0.01531003	0.02322034
17	0.03602361	0.05924395
18	0.07204722	0.13129117
19	0.12134268	0.25263385
20	0.16987976	0.42251361
21	0.19414829	0.6166619
22	0.17649845	0.79316035
23	0.12278153	0.91594188
24	0.06139076	0.97733264
25	0.01964504	0.99697769
26	0.00302231	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 26
Erwartungswert: $\mu = 20.8$		
Standardabweichung: $\sigma = 2.04$		
1 $\sigma$ -Intervall: $p(19 \leq X \leq 22) = 0.66186918$		
2 $\sigma$ -Intervall: $p(17 \leq X \leq 24) = 0.9541123$		
3 $\sigma$ -Intervall: $p(15 \leq X \leq 26) = 0.99765697$		

---

p = 0.8		n = 27
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0



4	0	0
5	0	0
6	0	0
7	0	0
8	2e-8	2e-8
9	1.6e-7	1.9e-7
10	0.00000119	0.00000137
11	0.00000734	0.00000871
12	0.00003914	0.00004786
13	0.00018067	0.00022853
14	0.00072268	0.0009512
15	0.00250528	0.00345648
16	0.00751583	0.01097232
17	0.01945275	0.03042507
18	0.04322833	0.0736534
19	0.08190631	0.15555971
20	0.1310501	0.2866098
21	0.17473346	0.46134327
22	0.19061832	0.65196159
23	0.16575506	0.81771665
24	0.11050338	0.92822003
25	0.05304162	0.98126165
26	0.0163205	0.99758215
27	0.00241785	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 27</b>
Erwartungswert: $\mu = 21.6$		
Standardabweichung: $\sigma = 2.078$		
1 $\sigma$ -Intervall: $p(20 \leq X \leq 23) = 0.66215695$		
2 $\sigma$ -Intervall: $p(18 \leq X \leq 25) = 0.95083658$		
3 $\sigma$ -Intervall: $p(16 \leq X \leq 27) = 0.99654352$		

---

<b>p = 0.8</b>		<b>n = 28</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	1e-8	1e-8

9	5e-8	5e-8
10	3.7e-7	4.2e-7
11	0.00000242	0.00000284
12	0.0000137	0.00001654
13	0.00006745	0.00008399
14	0.00028907	0.00037306
15	0.0010792	0.00145226
16	0.00350739	0.00495965
17	0.00990322	0.01486287
18	0.02420787	0.03907073
19	0.05096393	0.09003466
20	0.09173507	0.18176973
21	0.13978677	0.3215565
22	0.17791043	0.49946693
23	0.18564567	0.6851126
24	0.15470473	0.83981733
25	0.09901102	0.93882835
26	0.0456974	0.98452575
27	0.01353997	0.99806572
28	0.00193428	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 28
Erwartungswert: $\mu = 22.4$		
Standardabweichung: $\sigma = 2.117$		
1σ-Intervall: $p(21 \leq X \leq 24) = 0.6580476$		
2σ-Intervall: $p(19 \leq X \leq 26) = 0.94545502$		
3σ-Intervall: $p(17 \leq X \leq 28) = 0.99504035$		

---

p = 0.8		n = 29
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	1e-8	2e-8
10	1.1e-7	1.3e-7
11	7.8e-7	9.1e-7
12	0.00000467	0.00000558

13	0.00002445	0.00003003
14	0.00011177	0.00014181
15	0.0004471	0.0005889
16	0.00156484	0.00215374
17	0.00478656	0.00694029
18	0.01276415	0.01970444
19	0.02955908	0.04926352
20	0.05911815	0.10838167
21	0.10134541	0.20972708
22	0.1474115	0.35713858
23	0.17945748	0.53659607
24	0.17945748	0.71605355
25	0.14356599	0.85961953
26	0.0883483	0.94796783
27	0.03926591	0.98723374
28	0.01121883	0.99845257
29	0.00154743	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 29
Erwartungswert: $\mu = 23.2$		
Standardabweichung: $\sigma = 2.154$		
1σ-Intervall: $p(22 \leq X \leq 25) = 0.64989245$		
2σ-Intervall: $p(19 \leq X \leq 27) = 0.9675293$		
3σ-Intervall: $p(17 \leq X \leq 29) = 0.99784626$		

p = 0.8		n = 30
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	3e-8	4e-8
11	2.5e-7	2.8e-7
12	0.00000156	0.00000184
13	0.00000863	0.00001047
14	0.00004192	0.00005239
15	0.00017884	0.00023123

16	0.00067064	0.00090187
17	0.00220918	0.00311105
18	0.00638207	0.00949312
19	0.01612313	0.02561626
20	0.03547089	0.06108715
21	0.06756361	0.12865075
22	0.11055863	0.23920938
23	0.1538207	0.39303008
24	0.17945748	0.57248756
25	0.17227918	0.74476675
26	0.13252245	0.87728919
27	0.07853182	0.95582101
28	0.03365649	0.98947751
29	0.00928455	0.99876206
30	0.00123794	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 30</b>
Erwartungswert: $\mu = 24$		
Standardabweichung: $\sigma = 2.191$		
1 $\sigma$ -Intervall: $p(22 \leq X \leq 26) = 0.74863844$		
2 $\sigma$ -Intervall: $p(20 \leq X \leq 28) = 0.96386125$		
3 $\sigma$ -Intervall: $p(18 \leq X \leq 30) = 0.99688895$		

<b>p = 0.8</b>		<b>n = 31</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	1e-8	1e-8
11	8e-8	9e-8
12	5.1e-7	6e-7
13	0.00000297	0.00000357
14	0.00001529	0.00001886
15	0.0000693	0.00008815
16	0.0002772	0.00036535
17	0.00097835	0.00134371

18	0.00304376	0.00438746
19	0.00833029	0.01271775
20	0.01999269	0.03271043
21	0.04188944	0.07459987
22	0.07616261	0.15076248
23	0.11921104	0.26997352
24	0.15894806	0.42892158
25	0.17802182	0.6069434
26	0.16432784	0.77127123
27	0.12172432	0.89299556
28	0.06955676	0.96255231
29	0.02878211	0.99133442
30	0.00767523	0.99900965
31	0.00099035	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 31</b>
Erwartungswert: $\mu = 24.8$		
Standardabweichung: $\sigma = 2.227$		
1 $\sigma$ -Intervall: $p(23 \leq X \leq 27) = 0.74223308$		
2 $\sigma$ -Intervall: $p(21 \leq X \leq 29) = 0.95862399$		
3 $\sigma$ -Intervall: $p(19 \leq X \leq 31) = 0.99561254$		

<b>p = 0.8</b>		<b>n = 32</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	2e-8	3e-8
12	1.6e-7	1.9e-7
13	0.000001	0.00000119
14	0.00000544	0.00000663
15	0.00002609	0.00003272
16	0.00011088	0.00014359
17	0.00041743	0.00056102
18	0.00139143	0.00195246

19	0.00410106	0.00605352
20	0.01066277	0.01671629
21	0.02437204	0.04108832
22	0.04874407	0.08983239
23	0.0847723	0.17460469
24	0.12715844	0.30176313
25	0.16276281	0.46452594
26	0.17528303	0.63980897
27	0.15580713	0.7956161
28	0.11129081	0.90690691
29	0.06140183	0.96830873
30	0.02456073	0.99286947
31	0.00633825	0.99920772
32	0.00079228	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 32</b>
Erwartungswert: $\mu = 25.6$		
Standardabweichung: $\sigma = 2.263$		
1 $\sigma$ -Intervall: $p(24 \leq X \leq 27) = 0.62101141$		
2 $\sigma$ -Intervall: $p(22 \leq X \leq 30) = 0.95178114$		
3 $\sigma$ -Intervall: $p(19 \leq X \leq 32) = 0.99804754$		

<b>p = 0.8</b>		<b>n = 33</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	1e-8	1e-8
12	5e-8	6e-8
13	3.3e-7	3.9e-7
14	0.00000189	0.00000228
15	0.00000957	0.00001184
16	0.00004305	0.00005489
17	0.00017219	0.00022708
18	0.00061223	0.00083931

19	0.00193336	0.00277267
20	0.0054134	0.00818607
21	0.01340462	0.02159069
22	0.02924644	0.05083714
23	0.05594972	0.10678685
24	0.09324953	0.20003638
25	0.13427932	0.33431569
26	0.16526685	0.49958255
27	0.17138785	0.67097039
28	0.14690387	0.81787426
29	0.10131301	0.91918727
30	0.05403361	0.97322088
31	0.02091623	0.99413712
32	0.00522906	0.99936617
33	0.00063383	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 33</b>
Erwartungswert: $\mu = 26.4$		
Standardabweichung: $\sigma = 2.298$		
1 $\sigma$ -Intervall: $p(25 \leq X \leq 28) = 0.61783788$		
2 $\sigma$ -Intervall: $p(22 \leq X \leq 30) = 0.95163019$		
3 $\sigma$ -Intervall: $p(20 \leq X \leq 33) = 0.99722733$		

<b>p = 0.8</b>		<b>n = 34</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	2e-8	2e-8
13	1.1e-7	1.3e-7
14	6.4e-7	7.7e-7
15	0.00000342	0.00000419
16	0.00001626	0.00002045
17	0.00006888	0.00008933

18	0.0002602	0.00034953
19	0.00087646	0.00122598
20	0.00262937	0.00385535
21	0.00701165	0.010867
22	0.01657298	0.02743998
23	0.0345871	0.06202708
24	0.06340968	0.12543676
25	0.10145548	0.22689224
26	0.14047682	0.36736906
27	0.16649105	0.53386012
28	0.16649105	0.70035117
29	0.1377857	0.83813686
30	0.09185713	0.929994
31	0.04741013	0.97740413
32	0.0177788	0.99518293
33	0.00431001	0.99949294
34	0.00050706	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 34
Erwartungswert: $\mu = 27.2$		
Standardabweichung: $\sigma = 2.332$		
1σ-Intervall: $p(25 \leq X \leq 29) = 0.71270011$		
2σ-Intervall: $p(23 \leq X \leq 31) = 0.94996415$		
3σ-Intervall: $p(21 \leq X \leq 34) = 0.99614465$		

p = 0.8		n = 35
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	1e-8
13	3e-8	4e-8
14	2.1e-7	2.5e-7
15	0.0000012	0.00000145



16	0.00000599	0.00000744
17	0.00002679	0.00003423
18	0.00010714	0.00014137
19	0.00038345	0.00052482
20	0.00122704	0.00175186
21	0.00350582	0.00525768
22	0.00892391	0.01418159
23	0.02017581	0.0343574
24	0.04035161	0.07470901
25	0.07101884	0.14572785
26	0.10925975	0.2549876
27	0.14567967	0.40066727
28	0.16649105	0.56715833
29	0.16074998	0.72790831
30	0.12859998	0.85650829
31	0.08296773	0.93947602
32	0.04148387	0.98095989
33	0.01508504	0.99604493
34	0.00354942	0.99959435
35	0.00040565	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 35</b>
Erwartungswert: $\mu = 28$		
Standardabweichung: $\sigma = 2.366$		
1 $\sigma$ -Intervall: $p(26 \leq X \leq 30) = 0.71078044$		
2 $\sigma$ -Intervall: $p(24 \leq X \leq 32) = 0.94660249$		
3 $\sigma$ -Intervall: $p(21 \leq X \leq 35) = 0.99824814$		

---

<b>p = 0.8</b>		<b>n = 36</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0

13	1e-8	1e-8
14	7e-8	8e-8
15	4.1e-7	4.9e-7
16	0.00000216	0.00000265
17	0.00001015	0.0000128
18	0.00004286	0.00005566
19	0.0001624	0.00021806
20	0.00055217	0.00077023
21	0.0016828	0.00245302
22	0.00458944	0.00704246
23	0.01117429	0.01821676
24	0.02421097	0.04242772
25	0.04648506	0.08891278
26	0.07866702	0.1675798
27	0.11654374	0.28412354
28	0.14984195	0.43396548
29	0.16534284	0.59930832
30	0.15431998	0.7536283
31	0.11947353	0.87310184
32	0.07467096	0.9477728
33	0.0362041	0.9839769
34	0.01277792	0.99675481
35	0.00292067	0.99967548
36	0.00032452	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 36</b>
Erwartungswert: $\mu = 28.8$		
Standardabweichung: $\sigma = 2.4$		
1 $\sigma$ -Intervall: $p(27 \leq X \leq 31) = 0.70552203$		
2 $\sigma$ -Intervall: $p(24 \leq X \leq 33) = 0.96576014$		
3 $\sigma$ -Intervall: $p(22 \leq X \leq 36) = 0.99754698$		

---

<b>p = 0.8</b>		<b>n = 37</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0

9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	2e-8	3e-8
15	1.4e-7	1.6e-7
16	7.6e-7	9.2e-7
17	0.00000376	0.00000468
18	0.00001669	0.00002137
19	0.00006677	0.00008814
20	0.00024036	0.00032849
21	0.00077829	0.00110678
22	0.00226412	0.00337091
23	0.00590641	0.00927732
24	0.01378163	0.02305895
25	0.02866579	0.05172473
26	0.05292145	0.10464619
27	0.08624236	0.19088855
28	0.12320338	0.31409193
29	0.15294212	0.46703405
30	0.16313827	0.63017232
31	0.14735069	0.77752301
32	0.11051302	0.88803603
33	0.06697759	0.95501362
34	0.03151886	0.98653248
35	0.01080647	0.99733895
36	0.00240144	0.99974039
37	0.00025961	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 37</b>
Erwartungswert: $\mu = 29.6$		
Standardabweichung: $\sigma = 2.433$		
1 $\sigma$ -Intervall: $p(28 \leq X \leq 32) = 0.69714748$		
2 $\sigma$ -Intervall: $p(25 \leq X \leq 34) = 0.96347353$		
3 $\sigma$ -Intervall: $p(23 \leq X \leq 36) = 0.99636948$		

---

<b>p = 0.8</b>		<b>n = 38</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0

4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	1e-8	1e-8
15	5e-8	5e-8
16	2.6e-7	3.2e-7
17	0.00000136	0.00000168
18	0.00000634	0.00000802
19	0.00002671	0.00003472
20	0.00010148	0.00013621
21	0.00034794	0.00048415
22	0.00107546	0.00155961
23	0.00299258	0.00455219
24	0.00748146	0.01203365
25	0.01675846	0.02879211
26	0.03351692	0.06230903
27	0.05958563	0.12189466
28	0.09363457	0.21552923
29	0.12915113	0.34468035
30	0.15498135	0.49966171
31	0.15998075	0.65964246
32	0.13998316	0.79962561
33	0.10180593	0.90143155
34	0.05988584	0.96131739
35	0.02737639	0.98869377
36	0.00912546	0.99781924
37	0.00197307	0.99979231
38	0.00020769	1
k	$p(X=k)$	$p(x \leq k)$
<b>p = 0.8</b>		<b>n = 38</b>
Erwartungswert: $\mu = 30.4$		
Standardabweichung: $\sigma = 2.466$		
1 $\sigma$ -Intervall: $p(28 \leq X \leq 32) = 0.67773095$		
2 $\sigma$ -Intervall: $p(26 \leq X \leq 35) = 0.95990167$		
3 $\sigma$ -Intervall: $p(24 \leq X \leq 37) = 0.99524012$		

p = 0.8		n = 39
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	1e-8	2e-8
16	9e-8	1.1e-7
17	4.8e-7	5.9e-7
18	0.00000236	0.00000294
19	0.00001042	0.00001336
20	0.00004166	0.00005502
21	0.00015078	0.0002058
22	0.00049345	0.00069924
23	0.00145888	0.00215813
24	0.00389036	0.00604848
25	0.00933686	0.01538534
26	0.02011015	0.03549549
27	0.03873066	0.07422615
28	0.06639542	0.14062157
29	0.10073788	0.24135945
30	0.13431717	0.37567662
31	0.15598123	0.53165786
32	0.15598123	0.68763909
33	0.13234771	0.8199868
34	0.09342191	0.91340871
35	0.05338395	0.96679267
36	0.0237262	0.99051887
37	0.00769498	0.99821385
38	0.00162	0.99983385
39	0.00016615	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 39
Erwartungswert: μ = 31.2		
Standardabweichung: σ = 2.498		

1 $\sigma$ -Intervall:  
 $p(29 \leq X \leq 33) = 0.67936523$

2 $\sigma$ -Intervall:  
 $p(27 \leq X \leq 36) = 0.95502338$

3 $\sigma$ -Intervall:  
 $p(24 \leq X \leq 38) = 0.99767572$

p = 0.8		n = 40
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	1e-8
16	3e-8	4e-8
17	1.7e-7	2e-7
18	8.6e-7	0.00000106
19	0.00000397	0.00000503
20	0.00001666	0.00002169
21	0.00006348	0.00008518
22	0.00021931	0.00030449
23	0.00068653	0.00099102
24	0.00194518	0.0029362
25	0.00497966	0.00791585
26	0.01149152	0.01940737
27	0.02383425	0.04324162
28	0.04426361	0.08750524
29	0.07326391	0.16076915
30	0.10745374	0.26822289
31	0.13864998	0.40687287
32	0.15598123	0.5628541
33	0.15125453	0.71410863
34	0.12456255	0.83867118
35	0.08541432	0.9240855
36	0.0474524	0.97153791
37	0.02051996	0.99205786

38	0.00647999	0.99853785
39	0.00132923	0.99986708
40	0.00013292	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 40</b>
Erwartungswert: $\mu = 32$		
Standardabweichung: $\sigma = 2.53$		
1 $\sigma$ -Intervall: $p(30 \leq X \leq 34) = 0.67790203$		
2 $\sigma$ -Intervall: $p(27 \leq X \leq 37) = 0.97265049$		
3 $\sigma$ -Intervall: $p(25 \leq X \leq 39) = 0.99693088$		

---

<b>p = 0.8</b>		<b>n = 41</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	1e-8	1e-8
17	6e-8	7e-8
18	3.1e-7	3.7e-7
19	0.00000148	0.00000185
20	0.00000651	0.00000836
21	0.00002603	0.00003439
22	0.00009465	0.00012904
23	0.00031275	0.00044179
24	0.00093826	0.00138005
25	0.00255207	0.00393213
26	0.00628203	0.01021416
27	0.01396006	0.02417422
28	0.02792013	0.05209435
29	0.05006367	0.10215802

30	0.08010188	0.1822599
31	0.11369299	0.29595288
32	0.14211623	0.43806912
33	0.15503589	0.59310501
34	0.14591613	0.73902114
35	0.11673291	0.85575405
36	0.07782194	0.93357598
37	0.04206591	0.9756419
38	0.01771196	0.99335386
39	0.00544983	0.99880369
40	0.00108997	0.99989366
41	0.00010634	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 41</b>
Erwartungswert: $\mu = 32.8$		
Standardabweichung: $\sigma = 2.561$		
1 $\sigma$ -Intervall: $p(31 \leq X \leq 35) = 0.67349415$		
2 $\sigma$ -Intervall: $p(28 \leq X \leq 37) = 0.95146768$		
3 $\sigma$ -Intervall: $p(26 \leq X \leq 40) = 0.99596153$		

<b>p = 0.8</b>		<b>n = 42</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	2e-8	2e-8
18	1.1e-7	1.3e-7
19	5.4e-7	6.7e-7
20	0.00000248	0.00000315



21	0.00001041	0.00001357
22	0.00003975	0.00005332
23	0.00013827	0.00019159
24	0.00043786	0.00062944
25	0.00126102	0.00189047
26	0.00329806	0.00518853
27	0.00781764	0.01300617
28	0.01675208	0.02975824
29	0.03234884	0.06210708
30	0.05607131	0.11817839
31	0.0868201	0.20499849
32	0.11937764	0.32437613
33	0.14470017	0.46907629
34	0.15321194	0.62228823
35	0.14007949	0.76236772
36	0.10895071	0.87131843
37	0.07067073	0.94198917
38	0.03719512	0.97918429
39	0.01525954	0.99444383
40	0.00457786	0.99902169
41	0.00089324	0.99991493
42	0.00008507	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 42</b>
Erwartungswert: $\mu = 33.6$		
Standardabweichung: $\sigma = 2.592$		
1 $\sigma$ -Intervall: $p(32 \leq X \leq 36) = 0.66631994$		
2 $\sigma$ -Intervall: $p(29 \leq X \leq 38) = 0.94942604$		
3 $\sigma$ -Intervall: $p(26 \leq X \leq 41) = 0.99802446$		

<b>p = 0.8</b>		<b>n = 43</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0

11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	1e-8	1e-8
18	4e-8	4e-8
19	1.9e-7	2.4e-7
20	9.3e-7	0.00000117
21	0.00000407	0.00000524
22	0.00001628	0.00002152
23	0.00005946	0.00008097
24	0.00019819	0.00027916
25	0.00060249	0.00088165
26	0.00166843	0.00255008
27	0.00420198	0.00675206
28	0.00960452	0.01635658
29	0.01987143	0.03622801
30	0.03709333	0.07332134
31	0.06222107	0.13554241
32	0.09333161	0.22887402
33	0.12444214	0.35331616
34	0.14640252	0.49971868
35	0.15058545	0.65030413
36	0.13385373	0.78415786
37	0.10129472	0.88545258
38	0.06397561	0.94942819
39	0.03280801	0.9822362
40	0.0131232	0.9953594
41	0.00384094	0.99920034
42	0.00073161	0.99993194
43	0.00006806	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 43</b>
Erwartungswert: $\mu = 34.4$		
Standardabweichung: $\sigma = 2.623$		
1 $\sigma$ -Intervall: $p(32 \leq X \leq 37) = 0.74991017$		
2 $\sigma$ -Intervall: $p(30 \leq X \leq 39) = 0.94600819$		
3 $\sigma$ -Intervall: $p(27 \leq X \leq 42) = 0.99738186$		

---

<b>p = 0.8</b>		<b>n = 44</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0

1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	1e-8	1e-8
19	7e-8	8e-8
20	3.4e-7	4.2e-7
21	0.00000156	0.00000198
22	0.00000651	0.00000849
23	0.00002491	0.00003341
24	0.0000872	0.00012061
25	0.00027905	0.00039966
26	0.00081568	0.00121534
27	0.00217514	0.00339048
28	0.00528249	0.00867297
29	0.0116579	0.02033087
30	0.02331581	0.04364668
31	0.04211888	0.08576556
32	0.06844318	0.15420873
33	0.09955371	0.25376245
34	0.12883422	0.38259667
35	0.14723911	0.52983577
36	0.14723911	0.67707488
37	0.12734193	0.80441681
38	0.0938309	0.8982477
39	0.05774209	0.95598979
40	0.02887104	0.98486084
41	0.01126675	0.99612759
42	0.00321907	0.99934666
43	0.0005989	0.99994555
44	0.00005445	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 44</b>
Erwartungswert: $\mu = 35.2$		

Standardabweichung: $\sigma = 2.653$
1 $\sigma$ -Intervall: $p(33 \leq X \leq 37) = 0.65020807$
2 $\sigma$ -Intervall: $p(30 \leq X \leq 40) = 0.96452997$
3 $\sigma$ -Intervall: $p(28 \leq X \leq 43) = 0.99655508$

p = 0.8		n = 45
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	2e-8	3e-8
20	1.2e-7	1.5e-7
21	5.8e-7	7.4e-7
22	0.00000255	0.00000328
23	0.00001019	0.00001348
24	0.00003737	0.00005085
25	0.00012557	0.00017642
26	0.00038637	0.00056279
27	0.00108757	0.00165036
28	0.00279661	0.00444698
29	0.00655757	0.01100455
30	0.01398948	0.02499403
31	0.02707642	0.05207045
32	0.04738374	0.09945419
33	0.07466529	0.17411948
34	0.10540981	0.27952929
35	0.1325152	0.41204449
36	0.14723911	0.55928359

37	0.14325967	0.70254326
38	0.12063972	0.82318299
39	0.08661313	0.90979612
40	0.05196788	0.961764
41	0.02535019	0.98711419
42	0.00965721	0.9967714
43	0.00269504	0.99946644
44	0.00049001	0.99995644
45	0.00004356	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 45</b>
Erwartungswert: $\mu = 36$		
Standardabweichung: $\sigma = 2.683$		
1 $\sigma$ -Intervall: $p(34 \leq X \leq 38) = 0.64906351$		
2 $\sigma$ -Intervall: $p(31 \leq X \leq 41) = 0.96212016$		
3 $\sigma$ -Intervall: $p(28 \leq X \leq 44) = 0.99830608$		

<b>p = 0.8</b>		<b>n = 46</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	1e-8	1e-8
20	4e-8	5e-8
21	2.1e-7	2.7e-7
22	9.8e-7	0.00000124
23	0.00000408	0.00000532

24	0.00001563	0.00002095
25	0.00005501	0.00007596
26	0.00017773	0.00025369
27	0.00052661	0.00078031
28	0.00142938	0.00220969
29	0.0035488	0.00575849
30	0.00804395	0.01380244
31	0.01660687	0.03040932
32	0.03113789	0.0615472
33	0.05284005	0.11438725
34	0.08081419	0.19520144
35	0.11083089	0.30603233
36	0.13545998	0.44149231
37	0.14644322	0.58793553
38	0.13873568	0.72667121
39	0.1138344	0.84050561
40	0.07968408	0.9201897
41	0.04664434	0.96683404
42	0.02221159	0.98904563
43	0.00826478	0.99731041
44	0.00225403	0.99956444
45	0.00040072	0.99996516
46	0.00003484	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 46</b>
Erwartungswert: $\mu = 36.8$		
Standardabweichung: $\sigma = 2.713$		
1 $\sigma$ -Intervall: $p(35 \leq X \leq 39) = 0.64530417$		
2 $\sigma$ -Intervall: $p(32 \leq X \leq 42) = 0.95863631$		
3 $\sigma$ -Intervall: $p(29 \leq X \leq 44) = 0.99735475$		

<b>p = 0.8</b>		<b>n = 47</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0

10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	2e-8	2e-8
21	8e-8	1e-7
22	3.7e-7	4.6e-7
23	0.0000016	0.00000206
24	0.00000639	0.00000845
25	0.00002351	0.00003195
26	0.00007956	0.00011151
27	0.00024751	0.00035902
28	0.00070717	0.00106618
29	0.00185326	0.00291945
30	0.00444783	0.00736728
31	0.00975654	0.01712382
32	0.01951307	0.03663689
33	0.03547832	0.07211521
34	0.05843488	0.13055009
35	0.08681753	0.21736762
36	0.11575671	0.33312433
37	0.13765663	0.47078095
38	0.14490171	0.61568266
39	0.13375543	0.74943809
40	0.10700434	0.85644243
41	0.07307614	0.92951857
42	0.04175779	0.97127636
43	0.01942223	0.99069859
44	0.00706263	0.99776121
45	0.00188337	0.99964458
46	0.00032754	0.99997212
47	0.00002788	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 47</b>
Erwartungswert: $\mu = 37.6$		
Standardabweichung: $\sigma = 2.742$		
1σ-Intervall: $p(35 \leq X \leq 40) = 0.72589234$		
2σ-Intervall: $p(33 \leq X \leq 43) = 0.95406169$		

3 $\sigma$ -Intervall:  
 $p(30 \leq X \leq 45) = 0.99672513$

p = 0.8		n = 48
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	1e-8	1e-8
21	3e-8	3e-8
22	1.4e-7	1.7e-7
23	6.1e-7	7.8e-7
24	0.00000255	0.00000334
25	0.00000981	0.00001315
26	0.00003472	0.00004786
27	0.00011315	0.00016101
28	0.00033944	0.00050045
29	0.00093639	0.00143684
30	0.00237218	0.00380901
31	0.00550957	0.00931859
32	0.01170784	0.02102643
33	0.02270612	0.04373256
34	0.04006963	0.08380219
35	0.06411141	0.14791359
36	0.09260537	0.24051896
37	0.12013669	0.36065565
38	0.13910564	0.49976129
39	0.14267245	0.64243375
40	0.12840521	0.77083896
41	0.1002187	0.87105766



42	0.06681247	0.93787012
43	0.03729068	0.9751608
44	0.01695031	0.99211111
45	0.00602678	0.99813789
46	0.0015722	0.99971009
47	0.00026761	0.9999777
48	0.0000223	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 48</b>
Erwartungswert: $\mu = 38.4$		
Standardabweichung: $\sigma = 2.771$		
1 $\sigma$ -Intervall: $p(36 \leq X \leq 41) = 0.72314406$		
2 $\sigma$ -Intervall: $p(33 \leq X \leq 43) = 0.95413437$		
3 $\sigma$ -Intervall: $p(31 \leq X \leq 46) = 0.99590108$		

<b>p = 0.8</b>		<b>n = 49</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	1e-8	1e-8
22	5e-8	6e-8
23	2.3e-7	2.9e-7
24	0.000001	0.00000129
25	0.00000401	0.0000053

26	0.00001479	0.00002009
27	0.0000504	0.00007049
28	0.00015841	0.0002289
29	0.00045883	0.00068773
30	0.00122354	0.00191127
31	0.00299966	0.00491093
32	0.00674923	0.01166016
33	0.0139075	0.02556766
34	0.02617882	0.05174648
35	0.04487799	0.09662447
36	0.0698102	0.16643467
37	0.09811163	0.2645463
38	0.12393048	0.38847678
39	0.13981901	0.52829579
40	0.13981901	0.66811479
41	0.12276791	0.7908827
42	0.09353745	0.88442015
43	0.06090811	0.94532826
44	0.0332226	0.97855086
45	0.0147656	0.99331647
46	0.00513586	0.99845233
47	0.00131128	0.99976361
48	0.00021855	0.99998216
49	0.00001784	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 49</b>
Erwartungswert: $\mu = 39.2$		
Standardabweichung: $\sigma = 2.8$		
1 $\sigma$ -Intervall: $p(37 \leq X \leq 42) = 0.71798548$		
2 $\sigma$ -Intervall: $p(34 \leq X \leq 44) = 0.95298321$		
3 $\sigma$ -Intervall: $p(31 \leq X \leq 47) = 0.99785234$		

<b>p = 0.8</b>		<b>n = 50</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0

9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	2e-8	2e-8
23	9e-8	1.1e-7
24	3.9e-7	4.9e-7
25	0.0000016	0.00000209
26	0.00000616	0.00000826
27	0.00002191	0.00003017
28	0.000072	0.00010217
29	0.00021849	0.00032066
30	0.00061177	0.00093244
31	0.00157877	0.0025112
32	0.00374957	0.00626077
33	0.00818088	0.01444166
34	0.01636177	0.03080342
35	0.02991866	0.06072208
36	0.04986443	0.11058651
37	0.07547049	0.18605699
38	0.1032754	0.2893324
39	0.12710819	0.41644058
40	0.13981901	0.55625959
41	0.13640879	0.69266837
42	0.11692182	0.80959019
43	0.08701158	0.89660177
44	0.05537101	0.95197278
45	0.0295312	0.98150398
46	0.01283965	0.99434364
47	0.00437095	0.99871459
48	0.00109274	0.99980732
49	0.00017841	0.99998573
50	0.00001427	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 50</b>
Erwartungswert: $\mu = 40$		
Standardabweichung: $\sigma = 2.828$		

1 $\sigma$ -Intervall: $p(38 \leq X \leq 42) = 0.62353319$
2 $\sigma$ -Intervall: $p(35 \leq X \leq 45) = 0.95070056$
3 $\sigma$ -Intervall: $p(32 \leq X \leq 48) = 0.99729612$

p = 0.8		n = 51
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	1e-8	1e-8
23	3e-8	4e-8
24	1.5e-7	1.8e-7
25	6.3e-7	8.1e-7
26	0.00000251	0.00000333
27	0.00000931	0.00001264
28	0.00003193	0.00004457
29	0.0001013	0.00014587
30	0.00029715	0.00044302
31	0.00080517	0.00124819
32	0.00201293	0.00326112
33	0.00463583	0.00789695
34	0.00981706	0.01771401
35	0.01907314	0.03678715
36	0.03390781	0.07069497
37	0.05498564	0.1256806

38	0.08103147	0.20671207
39	0.10804196	0.31475403
40	0.12965035	0.44440438
41	0.13913696	0.58354134
42	0.13251139	0.71605274
43	0.11093977	0.82699251
44	0.08068347	0.90767597
45	0.05020305	0.95787902
46	0.02619289	0.98407192
47	0.01114591	0.99521783
48	0.0037153	0.99893313
49	0.00090987	0.999843
50	0.00014558	0.99998858
51	0.00001142	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 51
Erwartungswert: $\mu = 40.8$		
Standardabweichung: $\sigma = 2.857$		
1σ-Intervall: $p(38 \leq X \leq 43) = 0.7013119$		
2σ-Intervall: $p(36 \leq X \leq 46) = 0.94728476$		
3σ-Intervall: $p(33 \leq X \leq 49) = 0.99658189$		

p = 0.8		n = 52
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0

19	0	0
20	0	0
21	0	0
22	0	0
23	1e-8	1e-8
24	5e-8	7e-8
25	2.4e-7	3.1e-7
26	0.00000101	0.00000132
27	0.00000387	0.00000519
28	0.00001384	0.00001903
29	0.00004581	0.00006483
30	0.00014047	0.0002053
31	0.00039875	0.00060405
32	0.00104672	0.00165078
33	0.00253751	0.00418828
34	0.00567208	0.00986036
35	0.01166828	0.02152864
36	0.02204008	0.04356872
37	0.03812338	0.08169209
38	0.06019481	0.1418869
39	0.08643357	0.22832047
40	0.11236364	0.3406841
41	0.13154767	0.47223177
42	0.13781185	0.61004362
43	0.12819707	0.73824069
44	0.10488851	0.8431292
45	0.07458738	0.91771658
46	0.04540102	0.9631176
47	0.0231835	0.9863011
48	0.00965979	0.99596089
49	0.00315422	0.99911511
50	0.00075701	0.99987212
51	0.00011875	0.99999087
52	0.00000913	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 52</b>
Erwartungswert: $\mu = 41.6$		
Standardabweichung: $\sigma = 2.884$		
1 $\sigma$ -Intervall: $p(39 \leq X \leq 44) = 0.7012423$		
2 $\sigma$ -Intervall: $p(36 \leq X \leq 47) = 0.96477246$		
3 $\sigma$ -Intervall: $p(33 \leq X \leq 50) = 0.99822134$		

	p = 0.8	n = 53
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	2e-8	2e-8
25	9e-8	1.2e-7
26	3.9e-7	5.1e-7
27	0.00000158	0.00000209
28	0.00000587	0.00000796
29	0.00002023	0.00002819
30	0.00006474	0.00009293
31	0.00019213	0.00028505
32	0.00052835	0.0008134
33	0.00134488	0.00215828
34	0.00316442	0.0053227
35	0.00687132	0.01219402
36	0.01374264	0.02593665
37	0.02525674	0.05119339
38	0.04253766	0.09373105
39	0.06544256	0.15917361
40	0.09161958	0.25079319
41	0.11620044	0.36699364
42	0.13280051	0.49979414
43	0.13588889	0.63568304
44	0.12353536	0.75921839

45	0.09882828	0.85804668
46	0.06875011	0.92679679
47	0.04095751	0.9677543
48	0.02047876	0.98823306
49	0.00835868	0.99659173
50	0.00267478	0.99926651
51	0.00062936	0.99989587
52	0.00009682	0.99999269
53	0.00000731	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 53</b>
Erwartungswert: $\mu = 42.4$		
Standardabweichung: $\sigma = 2.912$		
1 $\sigma$ -Intervall: $p(40 \leq X \leq 45) = 0.69887306$		
2 $\sigma$ -Intervall: $p(37 \leq X \leq 48) = 0.9622964$		
3 $\sigma$ -Intervall: $p(34 \leq X \leq 51) = 0.99773759$		

<b>p = 0.8</b>		<b>n = 54</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0



24	1e-8	1e-8
25	3e-8	4e-8
26	1.5e-7	2e-7
27	6.3e-7	8.3e-7
28	0.00000244	0.00000326
29	0.00000874	0.000012
30	0.00002913	0.00004114
31	0.00009022	0.00013135
32	0.00025937	0.00039072
33	0.00069165	0.00108237
34	0.00170879	0.00279116
35	0.0039058	0.00669696
36	0.00824558	0.01494255
37	0.01604546	0.030988
38	0.02871292	0.05970092
39	0.04711864	0.10681957
40	0.07067796	0.17749753
41	0.09653575	0.27403328
42	0.11952046	0.39355374
43	0.13341818	0.52697192
44	0.13341818	0.66039011
45	0.11859394	0.77898405
46	0.09281265	0.8717967
47	0.06319159	0.93498829
48	0.03686176	0.97185005
49	0.01805474	0.98990479
50	0.0072219	0.99712669
51	0.00226569	0.99939238
52	0.00052285	0.99991523
53	0.00007892	0.99999415
54	0.00000585	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 54</b>
Erwartungswert: $\mu = 43.2$		
Standardabweichung: $\sigma = 2.939$		
1 $\sigma$ -Intervall: $p(41 \leq X \leq 46) = 0.69429917$		
2 $\sigma$ -Intervall: $p(38 \leq X \leq 49) = 0.95891679$		
3 $\sigma$ -Intervall: $p(35 \leq X \leq 52) = 0.99712407$		

p = 0.8		n = 55
k	p(X=k)	p(x≤k)
0	0	0
1	0	0

2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	1e-8	2e-8
26	6e-8	7e-8
27	2.5e-7	3.2e-7
28	9.9e-7	0.00000131
29	0.0000037	0.00000501
30	0.00001282	0.00001783
31	0.00004135	0.00005918
32	0.00012405	0.00018323
33	0.00034583	0.00052905
34	0.00089508	0.00142413
35	0.00214819	0.00357232
36	0.00477376	0.00834608
37	0.00980556	0.01815164
38	0.01857895	0.03673059
39	0.03239407	0.06912465
40	0.05183051	0.12095516
41	0.07584952	0.19680468
42	0.10113269	0.29793737
43	0.1223	0.42023738
44	0.13341818	0.55365556
45	0.13045334	0.6841089
46	0.11343768	0.79754658
47	0.08688844	0.88443502
48	0.05792563	0.94236064

49	0.03310036	0.975461
50	0.01588817	0.99134917
51	0.00623066	0.99757983
52	0.00191712	0.99949695
53	0.00043407	0.99993102
54	0.00006431	0.99999532
55	0.00000468	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 55</b>
Erwartungswert: $\mu = 44$		
Standardabweichung: $\sigma = 2.966$		
1 $\sigma$ -Intervall: $p(42 \leq X \leq 46) = 0.6007419$		
2 $\sigma$ -Intervall: $p(39 \leq X \leq 49) = 0.93873041$		
3 $\sigma$ -Intervall: $p(36 \leq X \leq 52) = 0.99592463$		

<b>p = 0.8</b>		<b>n = 56</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	1e-8

26	2e-8	3e-8
27	1e-7	1.2e-7
28	4e-7	5.2e-7
29	0.00000153	0.00000205
30	0.00000552	0.00000758
31	0.00001852	0.0000261
32	0.00005789	0.00008399
33	0.0001684	0.00025239
34	0.00045568	0.00070807
35	0.0011457	0.00185377
36	0.0026733	0.00452707
37	0.00578012	0.01030719
38	0.01156024	0.02186743
39	0.02134197	0.0432094
40	0.03628135	0.07949075
41	0.05663431	0.13612506
42	0.08090616	0.21703122
43	0.10536616	0.32239737
44	0.12452364	0.44692101
45	0.13282521	0.57974623
46	0.12705021	0.70679643
47	0.10812783	0.81492427
48	0.08109588	0.89602014
49	0.05296057	0.94898071
50	0.02965792	0.97863863
51	0.01395667	0.9925953
52	0.00536795	0.99796325
53	0.00162051	0.99958376
54	0.00036011	0.99994388
55	0.00005238	0.99999626
56	0.00000374	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 56</b>
Erwartungswert: $\mu = 44.8$		
Standardabweichung: $\sigma = 2.993$		
1 $\sigma$ -Intervall: $p(42 \leq X \leq 47) = 0.6787992$		
2 $\sigma$ -Intervall: $p(39 \leq X \leq 50) = 0.95677121$		
3 $\sigma$ -Intervall: $p(36 \leq X \leq 53) = 0.99773$		

---

	<b>p = 0.8</b>	<b>n = 57</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0

2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	1e-8	1e-8
27	4e-8	5e-8
28	1.6e-7	2e-7
29	6.2e-7	8.3e-7
30	0.00000233	0.00000316
31	0.00000812	0.00001128
32	0.0000264	0.00003768
33	0.00007999	0.00011767
34	0.00022586	0.00034353
35	0.00059368	0.00093721
36	0.00145122	0.00238843
37	0.00329467	0.0056831
38	0.00693614	0.01261924
39	0.01351658	0.02613582
40	0.02432985	0.05046567
41	0.04035194	0.09081762
42	0.06148868	0.15230629
43	0.08579816	0.23810445
44	0.10919765	0.3473021
45	0.12618395	0.47348605
46	0.13167021	0.60515627
47	0.12326573	0.728422
48	0.10272144	0.83114344

49	0.07546881	0.90661226
50	0.04830004	0.9549123
51	0.02651767	0.98142997
52	0.01223892	0.99366889
53	0.00461846	0.99828735
54	0.00136843	0.99965579
55	0.00029857	0.99995435
56	0.00004265	0.99999701
57	0.00000299	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 57</b>
Erwartungswert: $\mu = 45.6$		
Standardabweichung: $\sigma = 3.02$		
1 $\sigma$ -Intervall: $p(43 \leq X \leq 48) = 0.67883715$		
2 $\sigma$ -Intervall: $p(40 \leq X \leq 51) = 0.95529415$		
3 $\sigma$ -Intervall: $p(37 \leq X \leq 54) = 0.99726736$		

<b>p = 0.8</b>		<b>n = 58</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0

24	0	0
25	0	0
26	0	0
27	1e-8	2e-8
28	6e-8	8e-8
29	2.5e-7	3.3e-7
30	9.7e-7	0.00000129
31	0.00000349	0.00000478
32	0.00001178	0.00001656
33	0.00003712	0.00005368
34	0.00010916	0.00016284
35	0.00029942	0.00046226
36	0.00076519	0.00122745
37	0.00181991	0.00304736
38	0.00402296	0.00707033
39	0.00825223	0.01532256
40	0.01567924	0.03100179
41	0.02753427	0.05853606
42	0.04457929	0.10311535
43	0.06635057	0.16946592
44	0.09047805	0.25994398
45	0.11259491	0.37253889
46	0.12728121	0.4998201
47	0.12998932	0.62980941
48	0.11915687	0.74896629
49	0.09727092	0.8462372
50	0.07003506	0.91627226
51	0.04394357	0.96021583
52	0.02366192	0.98387775
53	0.01071483	0.99459258
54	0.00396846	0.99856104
55	0.00115446	0.9997155
56	0.00024738	0.99996288
57	0.00003472	0.99999761
58	0.00000239	1
k	$p(X=k)$	$p(x \leq k)$
<b>p = 0.8</b>		<b>n = 58</b>
Erwartungswert: $\mu = 46.4$		
Standardabweichung: $\sigma = 3.046$		
1 $\sigma$ -Intervall: $p(44 \leq X \leq 49) = 0.67677128$		
2 $\sigma$ -Intervall: $p(41 \leq X \leq 52) = 0.95287596$		
3 $\sigma$ -Intervall: $p(38 \leq X \leq 55) = 0.99666814$		

	p = 0.8	n = 59
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	1e-8	1e-8
28	2e-8	3e-8
29	1e-7	1.3e-7
30	3.9e-7	5.2e-7
31	0.00000147	0.00000199
32	0.00000515	0.00000714
33	0.00001684	0.00002398
34	0.00005153	0.00007551
35	0.00014722	0.00022272
36	0.00039258	0.0006153
37	0.00097613	0.00159143
38	0.00226052	0.00385196
39	0.00486882	0.00872077
40	0.00973763	0.0184584
41	0.01805024	0.03650864
42	0.03094327	0.06745192
43	0.04893355	0.11638547
44	0.07117607	0.18756154



45	0.09490143	0.28246296
46	0.11553217	0.39799513
47	0.12782283	0.52581796
48	0.12782283	0.65364079
49	0.11477968	0.76842047
50	0.09182375	0.86024422
51	0.06481676	0.92506098
52	0.03988724	0.96494822
53	0.0210725	0.98602072
54	0.00936556	0.99538628
55	0.00340566	0.99879193
56	0.00097304	0.99976498
57	0.00020485	0.99996983
58	0.00002826	0.99999808
59	0.00000192	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 59</b>
Erwartungswert: $\mu = 47.2$		
Standardabweichung: $\sigma = 3.072$		
1 $\sigma$ -Intervall: $p(45 \leq X \leq 50) = 0.67268268$		
2 $\sigma$ -Intervall: $p(42 \leq X \leq 53) = 0.94951207$		
3 $\sigma$ -Intervall: $p(38 \leq X \leq 56) = 0.99817354$		

<b>p = 0.8</b>		<b>n = 60</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0

18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	1e-8	1e-8
29	4e-8	5e-8
30	1.6e-7	2.1e-7
31	6.1e-7	8.1e-7
32	0.0000221	0.0000302
33	0.0000749	0.0001051
34	0.0002378	0.0003429
35	0.0007066	0.0010495
36	0.0019629	0.0030124
37	0.0050929	0.0081053
38	0.0123301	0.0204354
39	0.0278218	0.0482572
40	0.0584258	0.106683
41	0.1140015	0.2206845
42	0.2062885	0.426973
43	0.3454133	0.7723863
44	0.5338205	0.13062068
45	0.7592114	0.20654182
46	0.9902758	0.3055694
47	0.1179903	0.4235597
48	0.12782283	0.55138253
49	0.1252142	0.67659672
50	0.11018849	0.78678522
51	0.08642235	0.87320757
52	0.05983086	0.93303843
53	0.03612429	0.96916272
54	0.01873111	0.98789383
55	0.00817358	0.99606741
56	0.00291913	0.99898654
57	0.00081941	0.99980595
58	0.00016953	0.99997548
59	0.00002299	0.99999847
60	0.00000153	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 60</b>
Erwartungswert: $\mu = 48$		

Standardabweichung: $\sigma = 3.098$
1 $\sigma$ -Intervall: $p(45 \leq X \leq 51) = 0.74258689$
2 $\sigma$ -Intervall: $p(42 \leq X \leq 54) = 0.96582538$
3 $\sigma$ -Intervall: $p(39 \leq X \leq 57) = 0.99776241$

p = 0.8		n = 61
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	1e-8	2e-8
30	6e-8	8e-8
31	2.5e-7	3.3e-7
32	9.3e-7	0.00000126
33	0.00000326	0.00000452
34	0.00001075	0.00001526
35	0.00003316	0.00004842
36	0.00009579	0.00014421

37	0.00025889	0.0004031
38	0.00065403	0.00105713
39	0.00154285	0.00259997
40	0.00339426	0.00599423
41	0.00695409	0.01294833
42	0.01324589	0.02619422
43	0.02341134	0.04960557
44	0.03830947	0.08791504
45	0.05788987	0.14580491
46	0.08054243	0.22634734
47	0.10282012	0.32916746
48	0.11995681	0.44912426
49	0.1273011	0.57642537
50	0.12220906	0.69863442
51	0.10543527	0.80406969
52	0.08110405	0.88517374
53	0.05508954	0.94026328
54	0.03264566	0.97290894
55	0.01661961	0.98952855
56	0.00712269	0.99665123
57	0.00249919	0.99915042
58	0.00068943	0.99983985
59	0.00014022	0.99998008
60	0.0000187	0.99999877
61	0.00000123	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 61</b>
Erwartungswert: $\mu = 48.8$		
Standardabweichung: $\sigma = 3.124$		
1 $\sigma$ -Intervall: $p(46 \leq X \leq 51) = 0.65826478$		
2 $\sigma$ -Intervall: $p(43 \leq X \leq 55) = 0.96333432$		
3 $\sigma$ -Intervall: $p(40 \leq X \leq 58) = 0.99723988$		

---

<b>p = 0.8</b>		<b>n = 62</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0

8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	1e-8	1e-8
30	2e-8	3e-8
31	1e-7	1.3e-7
32	3.8e-7	5.1e-7
33	0.00000139	0.00000191
34	0.00000476	0.00000667
35	0.00001523	0.00002189
36	0.00004568	0.00006758
37	0.00012841	0.00019599
38	0.00033792	0.0005339
39	0.00083179	0.0013657
40	0.00191313	0.00327883
41	0.00410623	0.00738505
42	0.00821245	0.01559751
43	0.01527898	0.03087649
44	0.02639097	0.05726746
45	0.04222555	0.09949301
46	0.06242038	0.16191339
47	0.08499797	0.24691136
48	0.10624746	0.35315882
49	0.12142567	0.47458448
50	0.12628269	0.60086718
51	0.1188543	0.71972148
52	0.10056902	0.8202905
53	0.07590115	0.89619165
54	0.05060077	0.94679241

55	0.02944045	0.97623286
56	0.01472022	0.99095308
57	0.00619799	0.99715107
58	0.00213724	0.99928831
59	0.00057959	0.9998679
60	0.00011592	0.99998382
61	0.0000152	0.99999902
62	9.8e-7	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 62</b>
Erwartungswert: $\mu = 49.6$		
Standardabweichung: $\sigma = 3.15$		
1 $\sigma$ -Intervall: $p(47 \leq X \leq 52) = 0.65837711$		
2 $\sigma$ -Intervall: $p(44 \leq X \leq 55) = 0.94535637$		
3 $\sigma$ -Intervall: $p(41 \leq X \leq 59) = 0.99658907$		

<b>p = 0.8</b>		<b>n = 63</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0

25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	1e-8	1e-8
31	4e-8	5e-8
32	1.6e-7	2.1e-7
33	5.9e-7	7.9e-7
34	0.00000207	0.00000286
35	0.00000685	0.00000971
36	0.00002132	0.00003103
37	0.00006223	0.00009326
38	0.00017031	0.00026357
39	0.00043669	0.00070026
40	0.00104806	0.00174832
41	0.00235175	0.00410007
42	0.00492747	0.00902754
43	0.00962576	0.0186533
44	0.01750138	0.03615468
45	0.02955789	0.06571257
46	0.04626452	0.11197709
47	0.0669359	0.17891299
48	0.08924786	0.26816085
49	0.1092831	0.37744395
50	0.12239707	0.49984102
51	0.12479701	0.62463804
52	0.11519724	0.73983528
53	0.09563545	0.83547073
54	0.07084107	0.9063118
55	0.0463687	0.9526805
56	0.0264964	0.9791769
57	0.01301578	0.99219268
58	0.00538584	0.99757852
59	0.00182571	0.99940423
60	0.00048686	0.99989108
61	0.00009577	0.99998686
62	0.00001236	0.99999922
63	7.8e-7	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 63</b>
Erwartungswert: $\mu = 50.4$		
Standardabweichung: $\sigma = 3.175$		
1 $\sigma$ -Intervall: $p(48 \leq X \leq 53) = 0.65655774$		
2 $\sigma$ -Intervall: $p(45 \leq X \leq 56) = 0.94302222$		

3 $\sigma$ -Intervall:  
 $p(41 \leq X \leq 59) = 0.9976559$

p = 0.8		n = 64
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	2e-8	2e-8
32	6e-8	8e-8
33	2.4e-7	3.2e-7
34	8.8e-7	0.00000121
35	0.00000302	0.00000423
36	0.00000975	0.00001398
37	0.0000295	0.00004348
38	0.00008384	0.00012732
39	0.00022359	0.00035091
40	0.00055897	0.00090987
41	0.0013088	0.00221867



42	0.00286689	0.00508557
43	0.00586713	0.0109527
44	0.01120088	0.02215358
45	0.01991268	0.04206626
46	0.03289921	0.07496547
47	0.05039879	0.12536427
48	0.07139829	0.19676256
49	0.09325491	0.29001747
50	0.11190589	0.40192337
51	0.12287706	0.52480043
52	0.12287706	0.64767749
53	0.11128488	0.75896237
54	0.09067657	0.84963894
55	0.0659466	0.91558554
56	0.04239424	0.95797978
57	0.02380028	0.98178006
58	0.01148979	0.99326985
59	0.00467381	0.99794366
60	0.00155794	0.9995016
61	0.00040864	0.99991024
62	0.00007909	0.99998933
63	0.00001004	0.99999937
64	6.3e-7	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 64</b>
Erwartungswert: $\mu = 51.2$		
Standardabweichung: $\sigma = 3.2$		
1 $\sigma$ -Intervall: $p(48 \leq X \leq 54) = 0.72427468$		
2 $\sigma$ -Intervall: $p(45 \leq X \leq 57) = 0.95962648$		
3 $\sigma$ -Intervall: $p(42 \leq X \leq 60) = 0.99728292$		

<b>p = 0.8</b>		<b>n = 65</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0

10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	1e-8	1e-8
32	2e-8	3e-8
33	1e-7	1.3e-7
34	3.7e-7	5e-7
35	0.00000131	0.00000181
36	0.00000437	0.00000618
37	0.0000137	0.00001988
38	0.00004037	0.00006025
39	0.00011179	0.00017204
40	0.00029066	0.0004627
41	0.00070893	0.00117163
42	0.00162042	0.00279205
43	0.00346694	0.00625899
44	0.00693388	0.01319287
45	0.01294324	0.02613612
46	0.02250999	0.0486461
47	0.03639913	0.08504523
48	0.05459869	0.13964393
49	0.07576962	0.21541354
50	0.09698511	0.31239865
51	0.11410013	0.42649878
52	0.12287706	0.54937584
53	0.12055863	0.66993446
54	0.10716322	0.77709769
55	0.08573058	0.86282826
56	0.06123613	0.92406439

57	0.03867545	0.96273984
58	0.02133818	0.98407802
59	0.01012659	0.99420461
60	0.00405064	0.99825525
61	0.00132808	0.99958333
62	0.00034273	0.99992606
63	0.00006528	0.99999134
64	0.00000816	0.9999995
65	5e-7	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 65</b>
Erwartungswert: $\mu = 52$		
Standardabweichung: $\sigma = 3.225$		
1 $\sigma$ -Intervall: $p(49 \leq X \leq 55) = 0.72318434$		
2 $\sigma$ -Intervall: $p(46 \leq X \leq 58) = 0.9579419$		
3 $\sigma$ -Intervall: $p(43 \leq X \leq 61) = 0.99679127$		

<b>p = 0.8</b>		<b>n = 66</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0

24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	1e-8	1e-8
33	4e-8	5e-8
34	1.5e-7	2e-7
35	5.6e-7	7.6e-7
36	0.00000192	0.00000268
37	0.00000623	0.00000892
38	0.00001903	0.00002795
39	0.00005465	0.0000826
40	0.00014757	0.00023017
41	0.00037432	0.00060449
42	0.00089123	0.00149572
43	0.00198972	0.00348544
44	0.00416033	0.00764577
45	0.00813575	0.01578152
46	0.01485659	0.03063811
47	0.02528782	0.05592593
48	0.04003904	0.09596497
49	0.05883288	0.15479785
50	0.08001271	0.23481056
51	0.10040811	0.33521868
52	0.11585551	0.45107419
53	0.12241337	0.57348756
54	0.11787954	0.69136711
55	0.10287669	0.7942438
56	0.08083169	0.87507549
57	0.05672399	0.93179948
58	0.03520799	0.96700747
59	0.01909586	0.98610334
60	0.0089114	0.99501474
61	0.00350613	0.99852086
62	0.00113101	0.99965187
63	0.00028724	0.99993911
64	0.00005386	0.99999297
65	0.00000663	0.9999996
66	4e-7	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 66
Erwartungswert: $\mu = 52.8$		

Standardabweichung: $\sigma = 3.25$
1 $\sigma$ -Intervall: $p(50 \leq X \leq 56) = 0.72027764$
2 $\sigma$ -Intervall: $p(47 \leq X \leq 59) = 0.95546522$
3 $\sigma$ -Intervall: $p(44 \leq X \leq 62) = 0.99616643$

p = 0.8		n = 67
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	2e-8	2e-8
34	6e-8	8e-8
35	2.3e-7	3.2e-7
36	8.3e-7	0.00000115

37	0.00000278	0.00000393
38	0.00000879	0.00001273
39	0.00002616	0.00003888
40	0.00007324	0.00011212
41	0.00019292	0.00030504
42	0.0004777	0.00078273
43	0.00111093	0.00189366
44	0.00242384	0.00431751
45	0.00495541	0.00927292
46	0.00947992	0.01875284
47	0.01694284	0.03569568
48	0.02823806	0.06393374
49	0.04379781	0.10773155
50	0.06306885	0.17080039
51	0.08409179	0.25489219
52	0.10349759	0.35838978
53	0.11716709	0.47555686
54	0.12150661	0.59706347
55	0.11487897	0.71194245
56	0.09846769	0.81041014
57	0.07601015	0.88642029
58	0.05242079	0.93884108
59	0.03198557	0.97082665
60	0.01705897	0.98788562
61	0.00783035	0.99571596
62	0.0030311	0.99874707
63	0.00096225	0.99970932
64	0.00024056	0.99994988
65	0.00004441	0.9999943
66	0.00000538	0.99999968
67	3.2e-7	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 67</b>
Erwartungswert: $\mu = 53.6$		
Standardabweichung: $\sigma = 3.274$		
1 $\sigma$ -Intervall: $p(51 \leq X \leq 56) = 0.63960975$		
2 $\sigma$ -Intervall: $p(48 \leq X \leq 60) = 0.95218994$		
3 $\sigma$ -Intervall: $p(44 \leq X \leq 63) = 0.99781566$		

---

	<b>p = 0.8</b>	<b>n = 68</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0

2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	1e-8	1e-8
34	2e-8	3e-8
35	1e-7	1.3e-7
36	3.5e-7	4.8e-7
37	0.00000122	0.0000017
38	0.00000399	0.00000569
39	0.00001227	0.00001796
40	0.00003557	0.00005353
41	0.00009717	0.0001507
42	0.00024987	0.00040058
43	0.00060434	0.00100492
44	0.00137351	0.00237843
45	0.00293016	0.00530859
46	0.00586031	0.0111689
47	0.0109725	0.02214141
48	0.01920188	0.04134329

49	0.03135001	0.0726933
50	0.04765202	0.12034532
51	0.06727344	0.18761875
52	0.08797295	0.2755917
53	0.10623149	0.3818232
54	0.11803499	0.49985819
55	0.12018108	0.62003927
56	0.11159672	0.73163598
57	0.09397618	0.82561217
58	0.07129228	0.89690445
59	0.04833375	0.94523819
60	0.02900025	0.97423844
61	0.01521325	0.98945169
62	0.0068705	0.99632218
63	0.00261733	0.99893952
64	0.00081792	0.99975743
65	0.00020133	0.99995877
66	0.00003661	0.99999537
67	0.00000437	0.99999974
68	2.6e-7	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 68</b>
Erwartungswert: $\mu = 54.4$		
Standardabweichung: $\sigma = 3.298$		
1 $\sigma$ -Intervall: $p(52 \leq X \leq 57) = 0.63799342$		
2 $\sigma$ -Intervall: $p(48 \leq X \leq 60) = 0.95209703$		
3 $\sigma$ -Intervall: $p(45 \leq X \leq 64) = 0.997379$		

---

<b>p = 0.8</b>		<b>n = 69</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0



13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	1e-8	1e-8
35	4e-8	5e-8
36	1.5e-7	2e-7
37	5.3e-7	7.3e-7
38	0.00000177	0.0000025
39	0.00000564	0.00000814
40	0.00001693	0.00002507
41	0.00004789	0.00007296
42	0.00012771	0.00020068
43	0.00032077	0.00052144
44	0.00075818	0.00127962
45	0.00168484	0.00296446
46	0.00351619	0.00648065
47	0.00688275	0.0133634
48	0.01261838	0.02598178
49	0.02163151	0.04761329
50	0.03461041	0.0822237
51	0.0515763	0.1338
52	0.07141334	0.20521334
53	0.09162466	0.296838
54	0.10859219	0.40543019
55	0.11846421	0.5238944
56	0.11846421	0.64235861
57	0.10807261	0.75043122
58	0.0894394	0.83987062
59	0.06670057	0.90657119

60	0.04446705	0.95103824
61	0.02624285	0.97728109
62	0.0135447	0.99082579
63	0.00601986	0.99684565
64	0.00225745	0.9991031
65	0.0006946	0.9997977
66	0.00016839	0.99996609
67	0.00003016	0.99999625
68	0.00000355	0.99999979
69	2.1e-7	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 69</b>
Erwartungswert: $\mu = 55.2$		
Standardabweichung: $\sigma = 3.323$		
1 $\sigma$ -Intervall: $p(52 \leq X \leq 58) = 0.70607062$		
2 $\sigma$ -Intervall: $p(49 \leq X \leq 61) = 0.95129931$		
3 $\sigma$ -Intervall: $p(46 \leq X \leq 65) = 0.99683324$		

<b>p = 0.8</b>		<b>n = 70</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0

23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	2e-8	2e-8
36	6e-8	8e-8
37	2.2e-7	3e-7
38	7.8e-7	0.00000108
39	0.00000255	0.00000363
40	0.0000079	0.00001153
41	0.00002312	0.00003465
42	0.00006386	0.00009851
43	0.00016632	0.00026483
44	0.00040825	0.00067308
45	0.00094351	0.00161659
46	0.00205111	0.0036677
47	0.0041895	0.0078572
48	0.00802988	0.01588708
49	0.01442101	0.03030808
50	0.02422729	0.05453537
51	0.03800359	0.09253896
52	0.05554371	0.14808267
53	0.0754556	0.22353827
54	0.09501817	0.31855644
55	0.11056659	0.42912304
56	0.11846421	0.54758724
57	0.11638589	0.66397313
58	0.10434597	0.7683191
59	0.08489164	0.85321074
60	0.06225387	0.9154646
61	0.04082221	0.95628681
62	0.02370322	0.97999003
63	0.01203973	0.99202976
64	0.00526738	0.99729714
65	0.00194488	0.99924202
66	0.00058936	0.99983138
67	0.00014074	0.99997212
68	0.00002484	0.99999696
69	0.00000288	0.99999984

70	1.6e-7	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 70</b>
Erwartungswert: $\mu = 56$		
Standardabweichung: $\sigma = 3.347$		
1 $\sigma$ -Intervall: $p(53 \leq X \leq 59) = 0.70512807$		
2 $\sigma$ -Intervall: $p(50 \leq X \leq 62) = 0.94968194$		
3 $\sigma$ -Intervall: $p(46 \leq X \leq 66) = 0.99821479$		

<b>p = 0.8</b>		<b>n = 71</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0

32	0	0
33	0	0
34	0	0
35	1e-8	1e-8
36	2e-8	3e-8
37	9e-8	1.3e-7
38	3.3e-7	4.6e-7
39	0.00000113	0.00000159
40	0.00000362	0.00000521
41	0.00001094	0.00001615
42	0.00003127	0.00004742
43	0.00008435	0.00013177
44	0.00021471	0.00034648
45	0.0005153	0.00086178
46	0.00116503	0.00202681
47	0.00247879	0.0045056
48	0.00495758	0.00946318
49	0.0093081	0.01877128
50	0.01638226	0.03515354
51	0.02698255	0.06213609
52	0.04151161	0.1036477
53	0.05952609	0.16317379
54	0.07936812	0.24254191
55	0.09812785	0.34066976
56	0.11214612	0.45281588
57	0.11804854	0.57086442
58	0.1139779	0.68484233
59	0.1004551	0.78529743
60	0.08036408	0.86566151
61	0.05796753	0.92362905
62	0.03739841	0.96102746
63	0.02137052	0.98239798
64	0.01068526	0.99308323
65	0.00460288	0.99768612
66	0.00167377	0.99935989
67	0.00049963	0.99985953
68	0.00011756	0.99997709
69	0.00002045	0.99999753
70	0.00000234	0.99999987
71	1.3e-7	1
k	$p(X=k)$	$p(x \leq k)$
<b>p = 0.8</b>		<b>n = 71</b>
Erwartungswert: $\mu = 56.8$		
Standardabweichung: $\sigma = 3.37$		
1 $\sigma$ -Intervall: $p(54 \leq X \leq 60) = 0.70248772$		

2 $\sigma$ -Intervall:  
 $p(51 \leq X \leq 63) = 0.94724443$

3 $\sigma$ -Intervall:  
 $p(47 \leq X \leq 66) = 0.99733308$

p = 0.8		n = 72
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	1e-8	1e-8
37	4e-8	5e-8
38	1.4e-7	1.9e-7
39	4.9e-7	6.9e-7

40	0.00000163	0.00000231
41	0.00000508	0.0000074
42	0.00001501	0.00002241
43	0.00004188	0.00006429
44	0.00011042	0.00017471
45	0.00027483	0.00044954
46	0.00064525	0.00109479
47	0.00142778	0.00252257
48	0.00297455	0.00549712
49	0.00582768	0.0113248
50	0.01072293	0.02204773
51	0.01850232	0.04055005
52	0.02988836	0.07043841
53	0.04511451	0.11555292
54	0.06349449	0.17904741
55	0.08312006	0.26216748
56	0.10093151	0.36309898
57	0.1133266	0.47642559
58	0.11723442	0.59366
59	0.11127334	0.70493335
60	0.0964369	0.80137025
61	0.07588477	0.87725502
62	0.05385371	0.93110873
63	0.03419283	0.96530156
64	0.01923347	0.98453503
65	0.00946878	0.99400381
66	0.00401706	0.99802087
67	0.00143895	0.99945982
68	0.00042322	0.99988304
69	0.00009814	0.99998118
70	0.00001682	0.999998
71	0.0000019	0.99999989
72	1.1e-7	1

k	$p(X=k)$	$p(x \leq k)$
---	----------	---------------

<b>p = 0.8</b>	<b>n = 72</b>
----------------	---------------

Erwartungswert: $\mu = 57.6$
---------------------------------

Standardabweichung: $\sigma = 3.394$
---

1 $\sigma$ -Intervall: $p(55 \leq X \leq 60) = 0.62232283$
---

2 $\sigma$ -Intervall: $p(51 \leq X \leq 64) = 0.96248729$
---

3 $\sigma$ -Intervall: $p(48 \leq X \leq 67) = 0.99693725$
---

<b>p = 0.8</b>	<b>n = 73</b>
----------------	---------------

k	$p(X=k)$	$p(x \leq k)$
---	----------	---------------

0	0	0
---	---	---

1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	1e-8
37	2e-8	2e-8
38	6e-8	8e-8
39	2.1e-7	2.9e-7
40	7.2e-7	0.00000101
41	0.00000232	0.00000333
42	0.00000707	0.0000104
43	0.00002038	0.00003078
44	0.00005559	0.00008638
45	0.0001433	0.00022968
46	0.00034891	0.00057859
47	0.00080175	0.00138034



48	0.00173713	0.00311748
49	0.00354517	0.00666265
50	0.00680673	0.01346939
51	0.01227881	0.0257482
52	0.02077953	0.04652772
53	0.03293359	0.07946132
54	0.04879051	0.12825182
55	0.06741961	0.19567143
56	0.08668235	0.28235378
57	0.10341052	0.3857643
58	0.11410817	0.49987247
59	0.1160422	0.61591467
60	0.10830606	0.72422073
61	0.09232647	0.8165472
62	0.07147856	0.88802576
63	0.04992153	0.93794729
64	0.03120096	0.96914825
65	0.01728053	0.98642878
66	0.00837844	0.99480722
67	0.00350144	0.99830866
68	0.0012358	0.99954446
69	0.0003582	0.99990267
70	0.00008188	0.99998454
71	0.00001384	0.99999838
72	0.00000154	0.99999992
73	8e-8	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 73</b>
Erwartungswert: $\mu = 58.4$		
Standardabweichung: $\sigma = 3.418$		
1 $\sigma$ -Intervall: $p(55 \leq X \leq 61) = 0.68829538$		
2 $\sigma$ -Intervall: $p(52 \leq X \leq 65) = 0.96068059$		
3 $\sigma$ -Intervall: $p(49 \leq X \leq 68) = 0.99642698$		

---

<b>p = 0.8</b>		<b>n = 74</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0

7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	1e-8	1e-8
38	2e-8	3e-8
39	9e-8	1.2e-7
40	3.1e-7	4.4e-7
41	0.00000104	0.00000148
42	0.00000327	0.00000475
43	0.00000973	0.00001448
44	0.00002743	0.0000419
45	0.00007313	0.00011504
46	0.00018442	0.00029946
47	0.00043948	0.00073894
48	0.00098883	0.00172777
49	0.00209874	0.00382651
50	0.00419749	0.008024
51	0.00790115	0.01592515
52	0.01397895	0.0299041
53	0.02321034	0.05311444

54	0.03610497	0.08921942
55	0.05251633	0.14173574
56	0.07127216	0.2130079
57	0.09002799	0.30303588
58	0.10555005	0.40858594
59	0.11449497	0.52308091
60	0.11449497	0.63757588
61	0.10511014	0.74268602
62	0.08815689	0.83084291
63	0.06716715	0.89801007
64	0.04617742	0.94418749
65	0.02841687	0.97260436
66	0.01550011	0.98810447
67	0.00740304	0.99550751
68	0.00304831	0.99855582
69	0.00106028	0.9996161
70	0.00030294	0.99991904
71	0.00006827	0.99998731
72	0.00001138	0.99999869
73	0.00000125	0.99999993
74	7e-8	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 74</b>
Erwartungswert: $\mu = 59.2$		
Standardabweichung: $\sigma = 3.441$		
1 $\sigma$ -Intervall: $p(56 \leq X \leq 62) = 0.68910717$		
2 $\sigma$ -Intervall: $p(53 \leq X \leq 66) = 0.95820037$		
3 $\sigma$ -Intervall: $p(49 \leq X \leq 69) = 0.99788833$		

---

	<b>p = 0.8</b>	<b>n = 75</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0

12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	1e-8	1e-8
39	4e-8	5e-8
40	1.3e-7	1.8e-7
41	4.6e-7	6.4e-7
42	0.00000149	0.00000213
43	0.00000456	0.00000669
44	0.00001327	0.00001996
45	0.00003657	0.00005653
46	0.00009539	0.00015192
47	0.00023544	0.00038736
48	0.00054935	0.00093671
49	0.00121081	0.00214752
50	0.00251849	0.00466601
51	0.00493822	0.00960423
52	0.00911671	0.01872094
53	0.01582523	0.03454617
54	0.02578927	0.06033544
55	0.03938724	0.09972268
56	0.05626749	0.15599017
57	0.07502332	0.23101349
58	0.0931324	0.32414589

59	0.10733904	0.43148493
60	0.11449497	0.5459799
61	0.11261801	0.65859791
62	0.10171949	0.7603174
63	0.08395894	0.84427634
64	0.06296921	0.90724555
65	0.04262531	0.94987086
66	0.02583352	0.97570438
67	0.0138807	0.98958508
68	0.00653209	0.99611717
69	0.0026507	0.99876788
70	0.00090881	0.99967669
71	0.000256	0.99993269
72	0.00005689	0.99998958
73	0.00000935	0.99999894
74	0.00000101	0.99999995
75	5e-8	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 75
Erwartungswert: $\mu = 60$		
Standardabweichung: $\sigma = 3.464$		
1σ-Intervall: $p(57 \leq X \leq 63) = 0.68828617$		
2σ-Intervall: $p(54 \leq X \leq 66) = 0.94115821$		
3σ-Intervall: $p(50 \leq X \leq 70) = 0.99752917$		

p = 0.8		n = 76
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0

16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	1e-8
39	2e-8	2e-8
40	6e-8	8e-8
41	2e-7	2.8e-7
42	6.6e-7	9.4e-7
43	0.0000021	0.00000304
44	0.0000063	0.00000935
45	0.00001793	0.00002728
46	0.00004833	0.00007561
47	0.0001234	0.00019901
48	0.00029822	0.00049723
49	0.00068164	0.00117887
50	0.00147235	0.00265122
51	0.00300244	0.00565365
52	0.00577392	0.01142757
53	0.01045841	0.02188598
54	0.01781804	0.03970402
55	0.02850886	0.06821289
56	0.04276329	0.11097618
57	0.06001866	0.17099484
58	0.07864514	0.24963997
59	0.09597373	0.3456137
60	0.10877022	0.45438393
61	0.11411958	0.56850351
62	0.1104383	0.67894181

63	0.09816738	0.77710919
64	0.079761	0.85687018
65	0.05890043	0.91577061
66	0.03926695	0.95503756
67	0.02344296	0.97848052
68	0.01241098	0.9908915
69	0.00575582	0.99664731
70	0.00230233	0.99894964
71	0.00077825	0.99972789
72	0.00021618	0.99994407
73	0.00004738	0.99999145
74	0.00000768	0.99999914
75	8.2e-7	0.99999996
76	4e-8	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 76</b>
Erwartungswert: $\mu = 60.8$		
Standardabweichung: $\sigma = 3.487$		
1 $\sigma$ -Intervall: $p(58 \leq X \leq 64) = 0.68587535$		
2 $\sigma$ -Intervall: $p(54 \leq X \leq 67) = 0.95659454$		
3 $\sigma$ -Intervall: $p(51 \leq X \leq 71) = 0.99707667$		

<b>p = 0.8</b>		<b>n = 77</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0

19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	1e-8	1e-8
40	2e-8	3e-8
41	9e-8	1.2e-7
42	2.9e-7	4.1e-7
43	9.5e-7	0.00000136
44	0.00000294	0.0000043
45	0.00000863	0.00001293
46	0.00002401	0.00003694
47	0.00006335	0.00010029
48	0.00015836	0.00025865
49	0.0003749	0.00063356
50	0.00083978	0.00147334
51	0.00177837	0.00325171
52	0.00355673	0.00680844
53	0.00671082	0.01351925
54	0.01193034	0.02544959
55	0.0199562	0.0454058
56	0.03135975	0.07676554
57	0.04621437	0.12297991
58	0.06374395	0.18672386
59	0.08211086	0.26883472
60	0.09853303	0.36736775
61	0.1098401	0.47720784
62	0.11338332	0.59059117
63	0.10798412	0.69857528
64	0.0944861	0.79306139
65	0.07558888	0.86865027



66	0.05497373	0.923624
67	0.03610215	0.95972616
68	0.02123656	0.98096272
69	0.01107994	0.99204266
70	0.00506512	0.99710778
71	0.00199751	0.99910529
72	0.00066584	0.99977113
73	0.00018242	0.99995355
74	0.00003944	0.99999299
75	0.00000631	0.9999993
76	6.6e-7	0.99999997
77	3e-8	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 77</b>
Erwartungswert: $\mu = 61.6$		
Standardabweichung: $\sigma = 3.51$		
1 $\sigma$ -Intervall: $p(59 \leq X \leq 65) = 0.68192641$		
2 $\sigma$ -Intervall: $p(55 \leq X \leq 68) = 0.95551312$		
3 $\sigma$ -Intervall: $p(52 \leq X \leq 72) = 0.99651942$		

<b>p = 0.8</b>		<b>n = 78</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0

21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	1e-8	1e-8
41	4e-8	5e-8
42	1.3e-7	1.8e-7
43	4.2e-7	6e-7
44	0.00000135	0.00000195
45	0.00000408	0.00000603
46	0.0000117	0.00001773
47	0.00003188	0.00004961
48	0.00008235	0.00013196
49	0.00020167	0.00033363
50	0.00046788	0.00080151
51	0.0010275	0.00182901
52	0.00213404	0.00396305
53	0.00418755	0.0081506
54	0.00775472	0.01590532
55	0.01353551	0.02944083
56	0.02223691	0.05167775
57	0.03433067	0.08600842
58	0.04972028	0.1357287
59	0.06741733	0.20314604
60	0.08539529	0.28854133
61	0.10079444	0.38933577
62	0.11054874	0.49988451
63	0.11230348	0.61218799
64	0.10528452	0.7174725
65	0.09070666	0.80817916
66	0.07146585	0.87964502
67	0.05119942	0.93084443

68	0.03312903	0.96397347
69	0.01920524	0.98317871
70	0.00987698	0.99305568
71	0.0044516	0.99750728
72	0.00173118	0.99923846
73	0.00056915	0.99980761
74	0.00015383	0.99996144
75	0.00003282	0.99999425
76	0.00000518	0.99999943
77	5.4e-7	0.99999997
78	3e-8	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 78</b>
Erwartungswert: $\mu = 62.4$		
Standardabweichung: $\sigma = 3.533$		
1 $\sigma$ -Intervall: $p(59 \leq X \leq 65) = 0.67245046$		
2 $\sigma$ -Intervall: $p(56 \leq X \leq 69) = 0.95373787$		
3 $\sigma$ -Intervall: $p(52 \leq X \leq 72) = 0.99740944$		

<b>p = 0.8</b>		<b>n = 79</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0

22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	1e-8
41	1e-8	2e-8
42	5e-8	7e-8
43	1.9e-7	2.6e-7
44	6.1e-7	8.7e-7
45	0.0000019	0.00000277
46	0.0000056	0.00000837
47	0.00001574	0.00002411
48	0.00004197	0.00006608
49	0.00010621	0.00017229
50	0.00025491	0.00042721
51	0.0005798	0.00100701
52	0.00124881	0.00225582
53	0.00254474	0.00480056
54	0.00490098	0.00970155
55	0.00891088	0.01861242
56	0.01527579	0.03388822
57	0.02465566	0.05854388
58	0.03740859	0.09595247
59	0.05325969	0.14921217
60	0.07101293	0.22022509
61	0.08847512	0.30870021
62	0.1027453	0.41144551
63	0.11089969	0.5223452
64	0.11089969	0.63324489
65	0.10236894	0.73561384
66	0.0868585	0.82247233
67	0.06741257	0.8898849
68	0.04758534	0.93747024

69	0.03034428	0.96781452
70	0.01733959	0.9851541
71	0.0087919	0.993946
72	0.00390751	0.99785352
73	0.00149877	0.99935229
74	0.00048609	0.99983838
75	0.00012962	0.999968
76	0.00002729	0.99999529
77	0.00000425	0.99999954
78	4.4e-7	0.99999998
79	2e-8	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 79
Erwartungswert: $\mu = 63.2$		
Standardabweichung: $\sigma = 3.555$		
1 $\sigma$ -Intervall: $p(60 \leq X \leq 66) = 0.67326017$		
2 $\sigma$ -Intervall: $p(57 \leq X \leq 70) = 0.95126589$		
3 $\sigma$ -Intervall: $p(53 \leq X \leq 73) = 0.99709647$		

p = 0.8		n = 80
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0

22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	1e-8	1e-8
42	2e-8	3e-8
43	8e-8	1.1e-7
44	2.7e-7	3.8e-7
45	8.7e-7	0.00000125
46	0.00000264	0.00000389
47	0.00000763	0.00001152
48	0.00002099	0.0000325
49	0.00005482	0.00008732
50	0.00013595	0.00022328
51	0.00031989	0.00054317
52	0.0007136	0.00125677
53	0.00150799	0.00276477
54	0.00301599	0.00578076
55	0.00570296	0.01148372
56	0.01018386	0.02166758
57	0.01715177	0.03881935
58	0.02720625	0.0660256
59	0.04057881	0.10660441
60	0.05681034	0.16341475
61	0.07450536	0.23792012
62	0.09132916	0.32924927
63	0.10437618	0.43362545
64	0.11089969	0.54452514
65	0.10919354	0.65371868
66	0.09926685	0.75298554
67	0.08296931	0.83595485
68	0.06344712	0.89940197

69	0.04413713	0.9435391
70	0.02774334	0.97128243
71	0.01563005	0.98691248
72	0.00781502	0.99472751
73	0.00342576	0.99815327
74	0.00129624	0.99944951
75	0.0004148	0.9998643
76	0.00010916	0.99997346
77	0.00002268	0.99999614
78	0.00000349	0.99999963
79	3.5e-7	0.99999998
80	2e-8	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 80</b>
Erwartungswert: $\mu = 64$		
Standardabweichung: $\sigma = 3.578$		
1 $\sigma$ -Intervall: $p(61 \leq X \leq 67) = 0.67254009$		
2 $\sigma$ -Intervall: $p(57 \leq X \leq 71) = 0.9652449$		
3 $\sigma$ -Intervall: $p(54 \leq X \leq 74) = 0.99668474$		

<b>p = 0.8</b>		<b>n = 81</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0

21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	1e-8	1e-8
43	3e-8	5e-8
44	1.2e-7	1.7e-7
45	3.9e-7	5.6e-7
46	0.00000122	0.00000178
47	0.00000364	0.00000541
48	0.0000103	0.00001571
49	0.00002775	0.00004347
50	0.00007105	0.00011451
51	0.00017274	0.00028726
52	0.00039863	0.00068589
53	0.00087248	0.00155837
54	0.00180959	0.00336797
55	0.00355338	0.00692135
56	0.00659914	0.01352049
57	0.01157744	0.02509794
58	0.01916266	0.0442606
59	0.02988076	0.07414136
60	0.04382512	0.11796648
61	0.06034934	0.17831583
62	0.07787012	0.25618595
63	0.09393856	0.35012451
64	0.10568088	0.45580539
65	0.11055846	0.56636385
66	0.1072082	0.67357205
67	0.09600735	0.7695794



68	0.07906487	0.84864427
69	0.05958512	0.90822939
70	0.04085837	0.94908776
71	0.02532068	0.97440844
72	0.01406704	0.98847549
73	0.00693717	0.99541266
74	0.00299986	0.99841252
75	0.00111995	0.99953246
76	0.00035367	0.99988613
77	0.00009186	0.99997799
78	0.00001884	0.99999684
79	0.00000286	0.9999997
80	2.9e-7	0.99999999
81	1e-8	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 81</b>
Erwartungswert: $\mu = 64.8$		
Standardabweichung: $\sigma = 3.6$		
1 $\sigma$ -Intervall: $p(62 \leq X \leq 68) = 0.67032845$		
2 $\sigma$ -Intervall: $p(58 \leq X \leq 72) = 0.96337755$		
3 $\sigma$ -Intervall: $p(54 \leq X \leq 75) = 0.99797409$		

<b>p = 0.8</b>		<b>n = 82</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0

19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	1e-8
43	1e-8	2e-8
44	5e-8	7e-8
45	1.7e-7	2.4e-7
46	5.6e-7	8e-7
47	0.0000017	0.0000025
48	0.00000497	0.00000747
49	0.00001379	0.00002126
50	0.00003641	0.00005768
51	0.00009139	0.00014906
52	0.00021792	0.00036698
53	0.0004934	0.00086039
54	0.0010599	0.00192029
55	0.00215835	0.00407864
56	0.00416254	0.00824118
57	0.0075948	0.01583598
58	0.01309449	0.02893047
59	0.02130628	0.05023675
60	0.03266963	0.08290639
61	0.04712996	0.13003635
62	0.0638535	0.19388985
63	0.08108381	0.27497366
64	0.09628702	0.37126069
65	0.1066564	0.47791708

66	0.10988841	0.58780549
67	0.10496803	0.69277352
68	0.09261885	0.78539237
69	0.07516892	0.8605613
70	0.05583977	0.91640107
71	0.03775083	0.9541519
72	0.02306995	0.97722185
73	0.01264107	0.98986292
74	0.00614971	0.99601263
75	0.00262388	0.99863651
76	0.00096669	0.9996032
77	0.00030131	0.9999045
78	0.00007726	0.99998176
79	0.00001565	0.99999741
80	0.00000235	0.99999976
81	2.3e-7	0.99999999
82	1e-8	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 82</b>
Erwartungswert: $\mu = 65.6$		
Standardabweichung: $\sigma = 3.622$		
1 $\sigma$ -Intervall: $p(62 \leq X \leq 69) = 0.73052495$		
2 $\sigma$ -Intervall: $p(59 \leq X \leq 72) = 0.94829138$		
3 $\sigma$ -Intervall: $p(55 \leq X \leq 76) = 0.99768291$		

<b>p = 0.8</b>		<b>n = 83</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0

16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	1e-8	1e-8
44	2e-8	3e-8
45	8e-8	1.1e-7
46	2.5e-7	3.5e-7
47	7.9e-7	0.00000114
48	0.00000236	0.0000035
49	0.00000673	0.00001023
50	0.00001832	0.00002855
51	0.00004741	0.00007595
52	0.00011669	0.00019265
53	0.00027302	0.00046566
54	0.0006067	0.00107237
55	0.00127959	0.00235196
56	0.00255919	0.00491115
57	0.00484899	0.00976014
58	0.00869474	0.01845488
59	0.01473685	0.03319172
60	0.02357895	0.05677068
61	0.0355617	0.09233238
62	0.05047467	0.14280705

63	0.06729956	0.21010661
64	0.08412445	0.29423107
65	0.0983609	0.39259196
66	0.1073028	0.49989476
67	0.10890433	0.6087991
68	0.1024982	0.71129729
69	0.08912887	0.80042616
70	0.07130309	0.87172925
71	0.05222198	0.92395123
72	0.03481466	0.95876589
73	0.02098418	0.97975007
74	0.0113428	0.99109286
75	0.00544454	0.99653741
76	0.00229244	0.99882985
77	0.00083361	0.99966346
78	0.0002565	0.99991996
79	0.00006494	0.99998489
80	0.00001299	0.99999788
81	0.00000192	0.9999998
82	1.9e-7	0.99999999
83	1e-8	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 83</b>
Erwartungswert: $\mu = 66.4$		
Standardabweichung: $\sigma = 3.644$		
1 $\sigma$ -Intervall: $p(63 \leq X \leq 70) = 0.7289222$		
2 $\sigma$ -Intervall: $p(60 \leq X \leq 73) = 0.94655834$		
3 $\sigma$ -Intervall: $p(56 \leq X \leq 77) = 0.9973115$		

---

<b>p = 0.8</b>		<b>n = 84</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0

12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	1e-8	1e-8
45	3e-8	4e-8
46	1.1e-7	1.6e-7
47	3.6e-7	5.1e-7
48	0.0000011	0.00000161
49	0.00000323	0.00000484
50	0.00000905	0.00001389
51	0.00002413	0.00003803
52	0.00006126	0.00009929
53	0.00014796	0.00024725
54	0.00033975	0.000587
55	0.00074128	0.00132829
56	0.00153551	0.0028638
57	0.00301715	0.00588095
58	0.00561814	0.01149909

59	0.00990316	0.02140225
60	0.01650527	0.03790752
61	0.0259755	0.06388302
62	0.03854429	0.10242731
63	0.05383965	0.15626696
64	0.07066454	0.2269315
65	0.08697174	0.31390325
66	0.10014928	0.41405252
67	0.10762311	0.52167563
68	0.10762311	0.62929874
69	0.09982433	0.72912307
70	0.08556371	0.81468678
71	0.06748687	0.88217365
72	0.04874052	0.93091416
73	0.03204856	0.96296272
74	0.0190559	0.98201862
75	0.01016315	0.99218177
76	0.00481412	0.99699589
77	0.00200067	0.99899657
78	0.00071819	0.99971476
79	0.00021818	0.99993294
80	0.00005455	0.99998749
81	0.00001077	0.99999826
82	0.00000158	0.99999984
83	1.5e-7	0.99999999
84	1e-8	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 84</b>
Erwartungswert: $\mu = 67.2$		
Standardabweichung: $\sigma = 3.666$		
1 $\sigma$ -Intervall: $p(64 \leq X \leq 70) = 0.65841981$		
2 $\sigma$ -Intervall: $p(60 \leq X \leq 74) = 0.96061638$		
3 $\sigma$ -Intervall: $p(57 \leq X \leq 78) = 0.99685096$		

---

<b>p = 0.8</b>		<b>n = 85</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0

7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	1e-8
45	1e-8	2e-8
46	5e-8	7e-8
47	1.6e-7	2.3e-7
48	5.1e-7	7.3e-7
49	0.00000153	0.00000226
50	0.0000044	0.00000665
51	0.00001207	0.00001872
52	0.00003156	0.00005028
53	0.0000786	0.00012888



54	0.00018632	0.0003152
55	0.00042006	0.00073526
56	0.00090013	0.00163539
57	0.00183184	0.00346723
58	0.00353735	0.00700458
59	0.00647514	0.01347972
60	0.01122358	0.0247033
61	0.01839931	0.04310262
62	0.02848926	0.07159188
63	0.04160337	0.11319524
64	0.05720463	0.17039987
65	0.07392598	0.24432585
66	0.08960725	0.3339331
67	0.10164404	0.43557715
68	0.10762311	0.54320025
69	0.10606335	0.6492636
70	0.09697221	0.74623581
71	0.08194834	0.82818415
72	0.0637376	0.89192175
73	0.04540213	0.93732388
74	0.02945003	0.9667739
75	0.01727735	0.98405125
76	0.00909334	0.9931446
77	0.00425143	0.99739603
78	0.00174418	0.99914021
79	0.00061819	0.9997584
80	0.00018546	0.99994385
81	0.00004579	0.99998964
82	0.00000893	0.99999858
83	0.00000129	0.99999987
84	1.2e-7	0.99999999
85	1e-8	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 85</b>

Erwartungswert:  
 $\mu = 68$

Standardabweichung:  
 $\sigma = 3.688$

1 $\sigma$ -Intervall:  
 $p(65 \leq X \leq 71) = 0.65778428$

2 $\sigma$ -Intervall:  
 $p(61 \leq X \leq 75) = 0.95934795$

3 $\sigma$ -Intervall:  
 $p(57 \leq X \leq 79) = 0.99812301$

---

<b>p = 0.8</b>		<b>n = 86</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0

2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	1e-8	1e-8
46	2e-8	3e-8
47	7e-8	1e-7
48	2.3e-7	3.3e-7

49	7.1e-7	0.00000104
50	0.0000021	0.00000314
51	0.00000593	0.00000907
52	0.00001597	0.00002503
53	0.00004097	0.000066
54	0.00010015	0.00016615
55	0.00023307	0.00039921
56	0.00051607	0.00091529
57	0.00108647	0.00200176
58	0.00217294	0.0041747
59	0.00412491	0.0082996
60	0.00742483	0.01572444
61	0.01265873	0.02838316
62	0.0204173	0.04880047
63	0.03111208	0.07991255
64	0.04472362	0.12463617
65	0.0605489	0.18518507
66	0.07706223	0.2622473
67	0.09201461	0.35426191
68	0.10283986	0.45710177
69	0.10731115	0.56441292
70	0.10424512	0.66865804
71	0.09396743	0.76262548
72	0.07830619	0.84093167
73	0.06007051	0.90100218
74	0.04221171	0.94321388
75	0.02701549	0.97022937
76	0.01564055	0.98586992
77	0.00812496	0.99399488
78	0.00374998	0.99774486
79	0.00151898	0.99926384
80	0.00053164	0.99979549
81	0.00015752	0.99995301
82	0.00003842	0.99999143
83	0.00000741	0.99999884
84	0.00000106	0.9999999
85	1e-7	1
86	0	1
k	$p(X=k)$	$p(x \leq k)$
<b>p = 0.8</b>		<b>n = 86</b>
Erwartungswert: $\mu = 68.8$		
Standardabweichung: $\sigma = 3.709$		
1 $\sigma$ -Intervall: $p(66 \leq X \leq 72) = 0.6557466$		
2 $\sigma$ -Intervall: $p(62 \leq X \leq 76) = 0.95748676$		

3 $\sigma$ -Intervall:  
 $p(58 \leq X \leq 79) = 0.99726209$

p = 0.8		n = 87
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0

42	0	0
43	0	0
44	0	0
45	0	0
46	1e-8	1e-8
47	3e-8	4e-8
48	1e-7	1.4e-7
49	3.2e-7	4.7e-7
50	9.9e-7	0.00000146
51	0.00000287	0.00000432
52	0.00000794	0.00001226
53	0.00002097	0.00003323
54	0.0000528	0.00008603
55	0.00012673	0.00021276
56	0.00028967	0.00050243
57	0.00063015	0.00113258
58	0.00130376	0.00243635
59	0.00256333	0.00499968
60	0.00478489	0.00978457
61	0.00847161	0.01825618
62	0.01421044	0.03246663
63	0.02255626	0.05502288
64	0.03383439	0.08885727
65	0.04788867	0.13674595
66	0.06385157	0.20059751
67	0.08005271	0.28065022
68	0.09417966	0.37482988
69	0.10373412	0.478564
70	0.10669795	0.58526195
71	0.10218958	0.68745153
72	0.09083519	0.77828671
73	0.07465906	0.85294577
74	0.05649875	0.90944452
75	0.03917246	0.94861698
76	0.0247405	0.97335748
77	0.01413743	0.98749491
78	0.00724996	0.99474488
79	0.00330378	0.99804866
80	0.00132151	0.99937017
81	0.00045682	0.99982699
82	0.0001337	0.9999607
83	0.00003222	0.99999291
84	0.00000614	0.99999905
85	8.7e-7	0.99999992
86	8e-8	1
87	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>

<b>p = 0.8</b>	<b>n = 87</b>
Erwartungswert: $\mu = 69.6$	
Standardabweichung: $\sigma = 3.731$	
1 $\sigma$ -Intervall: $p(66 \leq X \leq 73) = 0.71619982$	
2 $\sigma$ -Intervall: $p(63 \leq X \leq 77) = 0.95502829$	
3 $\sigma$ -Intervall: $p(59 \leq X \leq 80) = 0.99693383$	

	<b>p = 0.8</b>	<b>n = 88</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0

34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	1e-8	2e-8
48	4e-8	6e-8
49	1.5e-7	2.1e-7
50	4.6e-7	6.7e-7
51	0.00000136	0.00000203
52	0.00000388	0.00000591
53	0.00001054	0.00001645
54	0.00002733	0.00004379
55	0.00006759	0.00011138
56	0.00015932	0.00027069
57	0.00035776	0.00062846
58	0.00076488	0.00139333
59	0.00155568	0.00294901
60	0.00300765	0.00595666
61	0.00552224	0.01147889
62	0.00961938	0.02109827
63	0.01587961	0.03697788
64	0.02481189	0.06178976
65	0.03664525	0.09843501
66	0.05108125	0.14951626
67	0.06709179	0.21660806
68	0.0828781	0.29948616
69	0.09609055	0.3955767
70	0.10432688	0.49990359
71	0.10579628	0.60569986
72	0.0999187	0.70561857
73	0.08759996	0.79321853
74	0.07102699	0.86424552
75	0.05303349	0.91727901
76	0.03628607	0.95356508
77	0.02261989	0.97618497
78	0.01275994	0.98894491
79	0.00646073	0.99540564
80	0.00290733	0.99831296

81	0.00114857	0.99946154
82	0.0003922	0.99985373
83	0.00011341	0.99996714
84	0.000027	0.99999414
85	0.00000508	0.99999922
86	7.1e-7	0.99999993
87	7e-8	1
88	0	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 88</b>
Erwartungswert: $\mu = 70.4$		
Standardabweichung: $\sigma = 3.752$		
1 $\sigma$ -Intervall: $p(67 \leq X \leq 74) = 0.71472926$		
2 $\sigma$ -Intervall: $p(63 \leq X \leq 77) = 0.9550867$		
3 $\sigma$ -Intervall: $p(60 \leq X \leq 81) = 0.99651252$		

---

<b>p = 0.8</b>		<b>n = 89</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0



25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	1e-8	1e-8
48	2e-8	3e-8
49	7e-8	9e-8
50	2.1e-7	3e-7
51	6.4e-7	9.4e-7
52	0.00000187	0.00000281
53	0.00000521	0.00000802
54	0.0000139	0.00002192
55	0.00003538	0.00005731
56	0.00008593	0.00014324
57	0.00019901	0.00034225
58	0.00043919	0.00078143
59	0.00092304	0.00170447
60	0.00184607	0.00355054
61	0.00351056	0.00706111
62	0.00634166	0.01340277
63	0.01087142	0.02427419
64	0.01766606	0.04194025
65	0.02717856	0.06911881
66	0.03953245	0.10865126
67	0.05428336	0.16293462
68	0.07024906	0.23318368
69	0.08552059	0.31870427
70	0.09773782	0.41644208
71	0.10462076	0.52106284

72	0.10462076	0.6256836
73	0.09745496	0.72313856
74	0.08428537	0.80742393
75	0.06742829	0.87485222
76	0.04968401	0.92453622
77	0.03355284	0.95808906
78	0.0206479	0.97873696
79	0.0115001	0.99023705
80	0.00575005	0.9959871
81	0.00255558	0.99854268
82	0.0009973	0.99953998
83	0.00033644	0.99987641
84	0.00009613	0.99997254
85	0.00002262	0.99999516
86	0.00000421	0.99999936
87	5.8e-7	0.99999994
88	5e-8	1
89	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 89</b>
Erwartungswert: $\mu = 71.2$		
Standardabweichung: $\sigma = 3.774$		
1 $\sigma$ -Intervall: $p(68 \leq X \leq 74) = 0.6444893$		
2 $\sigma$ -Intervall: $p(64 \leq X \leq 78) = 0.95446277$		
3 $\sigma$ -Intervall: $p(60 \leq X \leq 82) = 0.99783551$		

---

<b>p = 0.8</b>		<b>n = 90</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0

15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	1e-8	1e-8
49	3e-8	4e-8
50	9e-8	1.3e-7
51	2.9e-7	4.3e-7
52	8.8e-7	0.00000131
53	0.00000254	0.00000385
54	0.00000695	0.0000108
55	0.0000182	0.000029
56	0.00004549	0.00007449
57	0.00010855	0.00018304
58	0.00024704	0.00043008
59	0.00053596	0.00096604
60	0.00110764	0.00207368
61	0.00217897	0.00425265

62	0.00407678	0.00832944
63	0.00724762	0.01557705
64	0.01223035	0.0278074
65	0.01956856	0.04737597
66	0.02964934	0.0770253
67	0.04248263	0.11950793
68	0.0574765	0.17698443
69	0.07330336	0.25028779
70	0.08796403	0.33825183
71	0.09911441	0.43736623
72	0.10462076	0.54198699
73	0.1031876	0.64517459
74	0.09482104	0.73999563
75	0.08091395	0.82090958
76	0.06387944	0.88478902
77	0.04645777	0.93124679
78	0.03097185	0.96221864
79	0.01881834	0.98103698
80	0.01035009	0.99138706
81	0.00511115	0.99649822
82	0.00224392	0.99874214
83	0.00086513	0.99960726
84	0.00028838	0.99989564
85	0.00008142	0.99997706
86	0.00001894	0.999996
87	0.00000348	0.99999948
88	4.7e-7	0.99999996
89	4e-8	1
90	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 90</b>

Erwartungswert:  
 $\mu = 72$

Standardabweichung:  
 $\sigma = 3.795$

1 $\sigma$ -Intervall:  
 $p(69 \leq X \leq 75) = 0.64392515$

2 $\sigma$ -Intervall:  
 $p(65 \leq X \leq 79) = 0.95322957$

3 $\sigma$ -Intervall:  
 $p(61 \leq X \leq 83) = 0.99753358$

---

<b>p = 0.8</b>		<b>n = 91</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0

4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	1e-8	2e-8
50	4e-8	6e-8

51	1.3e-7	1.9e-7
52	4.1e-7	6.1e-7
53	0.00000121	0.00000182
54	0.00000342	0.00000524
55	0.0000092	0.00001444
56	0.00002366	0.0000381
57	0.00005811	0.0000962
58	0.00013625	0.00023245
59	0.00030483	0.00053728
60	0.00065029	0.00118757
61	0.00132191	0.00250948
62	0.00255853	0.00506801
63	0.00471095	0.00977896
64	0.00824416	0.01802312
65	0.01369799	0.03172112
66	0.02158472	0.05330583
67	0.03221599	0.08552183
68	0.0454814	0.13100323
69	0.06064187	0.1916451
70	0.0762355	0.2678806
71	0.09019411	0.35807471
72	0.10021568	0.45829039
73	0.10433413	0.56262451
74	0.10151429	0.6641388
75	0.09203962	0.75617842
76	0.07750705	0.83368547
77	0.0603951	0.89408057
78	0.04336059	0.93744116
79	0.02854115	0.96598231
80	0.01712469	0.98310699
81	0.0093023	0.99240929
82	0.00453771	0.996947
83	0.00196816	0.99891516
84	0.00074978	0.99966494
85	0.00024699	0.99991192
86	0.00006893	0.99998085
87	0.00001585	0.99999669
88	0.00000288	0.99999958
89	3.9e-7	0.99999996
90	3e-8	1
91	0	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 91
Erwartungswert: $\mu = 72.8$		
Standardabweichung: $\sigma = 3.816$		
1 $\sigma$ -Intervall: $p(69 \leq X \leq 76) = 0.70268224$		

2 $\sigma$ -Intervall:  
 $p(66 \leq X \leq 80) = 0.95138588$

3 $\sigma$ -Intervall:  
 $p(62 \leq X \leq 84) = 0.99715546$

p = 0.8		n = 92
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0

40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	1e-8	1e-8
50	2e-8	3e-8
51	6e-8	9e-8
52	1.9e-7	2.8e-7
53	5.7e-7	8.5e-7
54	0.00000166	0.0000025
55	0.00000458	0.00000708
56	0.00001209	0.00001917
57	0.00003055	0.00004972
58	0.00007373	0.00012345
59	0.00016996	0.00029341
60	0.00037392	0.00066733
61	0.00078462	0.00145195
62	0.00156923	0.00302118
63	0.00298902	0.0060102
64	0.00541759	0.01142779
65	0.00933493	0.02076272
66	0.01527534	0.03603806
67	0.02371097	0.05974903
68	0.03486908	0.09461811
69	0.0485135	0.14313161
70	0.0637606	0.2068922
71	0.07902722	0.28591942
72	0.09219842	0.37811784
73	0.10103937	0.47915721
74	0.10377016	0.58292737
75	0.09961935	0.68254673
76	0.08913311	0.77167983
77	0.07408466	0.84576449
78	0.0569882	0.90275269
79	0.0403967	0.94314939
80	0.02625785	0.96940724
81	0.01556021	0.98496745
82	0.00834938	0.99331683
83	0.0040238	0.99734063
84	0.00172448	0.99906512
85	0.00064922	0.99971434
86	0.00021137	0.99992571



87	0.00005831	0.99998402
88	0.00001325	0.99999727
89	0.00000238	0.99999965
90	3.2e-7	0.99999997
91	3e-8	1
92	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 92</b>
Erwartungswert: $\mu = 73.6$		
Standardabweichung: $\sigma = 3.837$		
1 $\sigma$ -Intervall: $p(70 \leq X \leq 77) = 0.70263289$		
2 $\sigma$ -Intervall: $p(66 \leq X \leq 81) = 0.96420473$		
3 $\sigma$ -Intervall: $p(63 \leq X \leq 85) = 0.99669315$		

<b>p = 0.8</b>		<b>n = 93</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0

27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	1e-8	1e-8
51	3e-8	4e-8
52	9e-8	1.2e-7
53	2.7e-7	3.9e-7
54	7.9e-7	0.00000118
55	0.00000224	0.00000342
56	0.00000608	0.0000095
57	0.00001578	0.00002528
58	0.00003918	0.00006446
59	0.00009298	0.00015744
60	0.00021075	0.0003682
61	0.00045606	0.00082426
62	0.00094154	0.0017658
63	0.00185319	0.00361899
64	0.00347473	0.00709372
65	0.00620106	0.01329478
66	0.01052301	0.02381779
67	0.01696246	0.04078025
68	0.02594259	0.06672285
69	0.03759796	0.10432081
70	0.05156292	0.15588373
71	0.06681392	0.22269765
72	0.08166146	0.30435911
73	0.09396661	0.39832572

74	0.10158553	0.49991124
75	0.10294	0.60285124
76	0.0975221	0.70037335
77	0.08612342	0.78649676
78	0.07066537	0.85716213
79	0.0536699	0.91083203
80	0.03756893	0.94840096
81	0.02411833	0.97251929
82	0.01411804	0.98663733
83	0.00748426	0.99412159
84	0.00356394	0.99768553
85	0.00150943	0.99919496
86	0.00056165	0.99975661
87	0.00018076	0.99993737
88	0.0000493	0.99998667
89	0.00001108	0.99999775
90	0.00000197	0.99999972
91	2.6e-7	0.99999998
92	2e-8	1
93	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 93</b>
Erwartungswert: $\mu = 74.4$		
Standardabweichung: $\sigma = 3.857$		
1 $\sigma$ -Intervall: $p(71 \leq X \leq 78) = 0.70127841$		
2 $\sigma$ -Intervall: $p(67 \leq X \leq 82) = 0.96281954$		
3 $\sigma$ -Intervall: $p(63 \leq X \leq 85) = 0.99742916$		

---

<b>p = 0.8</b>		<b>n = 94</b>
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0

13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	1e-8	2e-8
52	4e-8	5e-8
53	1.2e-7	1.8e-7
54	3.7e-7	5.5e-7
55	0.00000108	0.00000163
56	0.00000301	0.00000463
57	0.00000802	0.00001265
58	0.00002046	0.00003312
59	0.00004994	0.00008306

60	0.00011653	0.0001996
61	0.00025982	0.00045941
62	0.00055315	0.00101257
63	0.00112387	0.00213644
64	0.0021775	0.00431393
65	0.00402	0.00833393
66	0.00706545	0.01539938
67	0.0118109	0.02721028
68	0.01875849	0.04596877
69	0.02827367	0.07424244
70	0.04039095	0.11463339
71	0.05461312	0.16924651
72	0.06978343	0.23902994
73	0.08412249	0.32315243
74	0.09549039	0.41864282
75	0.10185642	0.52049924
76	0.10185642	0.62235566
77	0.09524237	0.71759803
78	0.08303181	0.80062984
79	0.06726627	0.86789611
80	0.05044971	0.91834582
81	0.03487881	0.95322463
82	0.02211827	0.97534289
83	0.01279129	0.98813418
84	0.0067002	0.99483438
85	0.00315303	0.99798742
86	0.00131987	0.99930729
87	0.00048547	0.99979276
88	0.00015447	0.99994723
89	0.00004165	0.99998888
90	0.00000926	0.99999814
91	0.00000163	0.99999977
92	2.1e-7	0.99999998
93	2e-8	1
94	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 94</b>
Erwartungswert: $\mu = 75.2$		
Standardabweichung: $\sigma = 3.878$		
1 $\sigma$ -Intervall: $p(72 \leq X \leq 79) = 0.6986496$		
2 $\sigma$ -Intervall: $p(68 \leq X \leq 82) = 0.94813261$		
3 $\sigma$ -Intervall: $p(64 \leq X \leq 86) = 0.99717086$		

	p = 0.8	n = 95
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0

45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	1e-8	1e-8
52	2e-8	2e-8
53	6e-8	8e-8
54	1.7e-7	2.5e-7
55	5.1e-7	7.6e-7
56	0.00000147	0.00000223
57	0.00000401	0.00000624
58	0.00001051	0.00001675
59	0.00002636	0.00004311
60	0.00006326	0.00010637
61	0.00014519	0.00025156
62	0.00031848	0.00057004
63	0.0006673	0.00123734
64	0.0013346	0.00257194
65	0.002546	0.00511793
66	0.00462909	0.00974702
67	0.00801454	0.01776156
68	0.01320042	0.03096198
69	0.02066153	0.05162351
70	0.03069712	0.08232063
71	0.04323539	0.12555602
72	0.05764718	0.1832032
73	0.07265124	0.25585444
74	0.08639607	0.34225051
75	0.0967636	0.43901411
76	0.10185642	0.54087053
77	0.10053361	0.64140414
78	0.09280025	0.73420439
79	0.0798787	0.81408309
80	0.06390296	0.87798605
81	0.04733553	0.92532158
82	0.0323267	0.95764828
83	0.02025287	0.97790115
84	0.01157307	0.98947422
85	0.00599077	0.99546499
86	0.0027864	0.99825139
87	0.00115299	0.99940439
88	0.00041927	0.99982366
89	0.00013191	0.99995556
90	0.00003517	0.99999074
91	0.00000773	0.99999847

92	0.00000134	0.99999981
93	1.7e-7	0.99999998
94	1e-8	1
95	0	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 95
Erwartungswert: $\mu = 76$		
Standardabweichung: $\sigma = 3.899$		
1 $\sigma$ -Intervall: $p(73 \leq X \leq 79) = 0.6308799$		
2 $\sigma$ -Intervall: $p(69 \leq X \leq 83) = 0.94693917$		
3 $\sigma$ -Intervall: $p(65 \leq X \leq 87) = 0.99683245$		

p = 0.8		n = 96
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0



29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	0	0
52	1e-8	1e-8
53	2e-8	4e-8
54	8e-8	1.1e-7
55	2.4e-7	3.5e-7
56	7e-7	0.00000106
57	0.00000197	0.00000303
58	0.00000531	0.00000834
59	0.00001368	0.00002202
60	0.00003374	0.00005576
61	0.00007965	0.00013541
62	0.00017985	0.00031525
63	0.00038825	0.0007035
64	0.00080076	0.00150426
65	0.00157688	0.00308113
66	0.00296262	0.00604375
67	0.00530618	0.01134993
68	0.00905172	0.02040165
69	0.01469264	0.03509429
70	0.02266865	0.05776293
71	0.03320478	0.09096771
72	0.04611774	0.13708545
73	0.06064799	0.19773344
74	0.07540021	0.27313365
75	0.08846958	0.36160323

76	0.09778216	0.45938539
77	0.10159186	0.56097725
78	0.09898694	0.65996419
79	0.09021594	0.75018013
80	0.07668355	0.82686368
81	0.06058947	0.88745316
82	0.04433376	0.93178692
83	0.02991194	0.96169885
84	0.01851691	0.98021577
85	0.01045661	0.99067238
86	0.00534989	0.99602227
87	0.00245972	0.99848199
88	0.00100625	0.99948824
89	0.0003618	0.99985004
90	0.00011256	0.9999626
91	0.00002969	0.99999228
92	0.00000645	0.99999874
93	0.00000111	0.99999985
94	1.4e-7	0.99999999
95	1e-8	1
96	0	1
k	p(X=k)	p(x≤k)
<b>p = 0.8</b>		<b>n = 96</b>
Erwartungswert: $\mu = 76.8$		
Standardabweichung: $\sigma = 3.919$		
1 $\sigma$ -Intervall: $p(73 \leq X \leq 80) = 0.68977823$		
2 $\sigma$ -Intervall: $p(69 \leq X \leq 84) = 0.95981412$		
3 $\sigma$ -Intervall: $p(66 \leq X \leq 88) = 0.9964071$		

---

	<b>p = 0.8</b>	<b>n = 97</b>
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0

12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	0	0
52	0	0
53	1e-8	2e-8
54	4e-8	5e-8
55	1.1e-7	1.6e-7
56	3.3e-7	4.9e-7
57	9.6e-7	0.00000145
58	0.00000264	0.00000409

59	0.00000698	0.00001108
60	0.00001769	0.00002877
61	0.00004292	0.00007169
62	0.00009969	0.00017138
63	0.00022153	0.0003929
64	0.00047075	0.00086365
65	0.00095598	0.00181963
66	0.00185402	0.00367366
67	0.00343133	0.00710499
68	0.00605529	0.01316027
69	0.0101799	0.02334017
70	0.01628784	0.03962801
71	0.02477587	0.06440389
72	0.03578737	0.10019126
73	0.04902379	0.14921505
74	0.06359844	0.21281349
75	0.07801408	0.29082757
76	0.09033209	0.38115966
77	0.0985441	0.47970376
78	0.10107087	0.58077464
79	0.09723274	0.67800738
80	0.08750947	0.76551684
81	0.07346474	0.83898158
82	0.05733833	0.89631991
83	0.0414494	0.93776931
84	0.02763293	0.96540224
85	0.01690485	0.98230709
86	0.00943527	0.99174235
87	0.00477186	0.99651421
88	0.00216903	0.99868324
89	0.00087736	0.9995606
90	0.00031195	0.99987255
91	0.00009598	0.99996853
92	0.00002504	0.99999357
93	0.00000538	0.99999896
94	9.2e-7	0.99999987
95	1.2e-7	0.99999999
96	1e-8	1
97	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 97</b>
Erwartungswert: $\mu = 77.6$		
Standardabweichung: $\sigma = 3.94$		
1 $\sigma$ -Intervall: $p(74 \leq X \leq 81) = 0.68976653$		
2 $\sigma$ -Intervall: $p(70 \leq X \leq 85) = 0.95896691$		

3 $\sigma$ -Intervall:  
 $p(66 \leq X \leq 89) = 0.99774097$

p = 0.8		n = 98
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0

42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	0	0
52	0	0
53	0	1e-8
54	2e-8	2e-8
55	5e-8	7e-8
56	1.6e-7	2.3e-7
57	4.6e-7	6.9e-7
58	0.00000129	0.00000198
59	0.00000351	0.00000549
60	0.00000912	0.00001461
61	0.00002274	0.00003735
62	0.00005427	0.00009163
63	0.00012406	0.00021568
64	0.00027137	0.00048705
65	0.00056779	0.00105485
66	0.00113559	0.00219044
67	0.00216949	0.00435992
68	0.00395612	0.00831604
69	0.00688021	0.01519625
70	0.01140149	0.02659774
71	0.01798545	0.04458319
72	0.02697817	0.07156136
73	0.03843465	0.10999601
74	0.05193872	0.16193474
75	0.06648156	0.2284163
76	0.08047768	0.30889399
77	0.0919745	0.40086848
78	0.09904946	0.49991794
79	0.10030325	0.60022118
80	0.09528808	0.69550927
81	0.08470052	0.78020979
82	0.07023946	0.85044925
83	0.05416054	0.90460979
84	0.0386861	0.94329589
85	0.02548731	0.96878321
86	0.01541093	0.98419414
87	0.00850258	0.99269673
88	0.00425129	0.99694802

89	0.00191069	0.99885871
90	0.00076428	0.99962299
91	0.00026876	0.99989175
92	0.0000818	0.99997354
93	0.00002111	0.99999465
94	0.00000449	0.99999914
95	7.6e-7	0.9999999
96	9e-8	0.99999999
97	1e-8	1
98	0	1
k	p(X=k)	p(x≤k)
p = 0.8		n = 98
Erwartungswert: $\mu = 78.4$		
Standardabweichung: $\sigma = 3.96$		
1 $\sigma$ -Intervall: $p(75 \leq X \leq 82) = 0.68851451$		
2 $\sigma$ -Intervall: $p(71 \leq X \leq 86) = 0.9575964$		
3 $\sigma$ -Intervall: $p(67 \leq X \leq 90) = 0.99743255$		

p = 0.8		n = 99
k	p(X=k)	p(x≤k)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0

23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	0	0
52	0	0
53	0	0
54	1e-8	1e-8
55	2e-8	3e-8
56	7e-8	1e-7
57	2.2e-7	3.2e-7
58	6.2e-7	9.4e-7
59	0.00000174	0.00000268
60	0.00000463	0.00000731
61	0.00001185	0.00001916
62	0.00002904	0.00004821
63	0.00006823	0.00011644
64	0.00015352	0.00026996
65	0.00033066	0.00060061
66	0.00068135	0.00128197
67	0.00134237	0.00262434
68	0.00252681	0.00515115
69	0.00454094	0.00969209



70	0.00778446	0.01747655
71	0.01271828	0.03019483
72	0.01978399	0.04997882
73	0.02926947	0.07924829
74	0.04113547	0.12038376
75	0.05484729	0.17523105
76	0.06928079	0.24451184
77	0.08277705	0.32728888
78	0.09338949	0.42067837
79	0.09930021	0.51997859
80	0.09930021	0.6192788
81	0.09317057	0.71244937
82	0.08180831	0.79425768
83	0.06702367	0.86128135
84	0.05106566	0.91234701
85	0.03604635	0.94839336
86	0.02347204	0.97186539
87	0.01402926	0.98589466
88	0.00765233	0.99354698
89	0.00378317	0.99733016
90	0.00168141	0.99901157
91	0.00066517	0.99967674
92	0.00023136	0.9999081
93	0.00006966	0.99997776
94	0.00001779	0.99999555
95	0.00000374	0.99999929
96	6.2e-7	0.99999992
97	8e-8	0.99999999
98	1e-8	1
99	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>

**p = 0.8**

**n = 99**

Erwartungswert:  
 $\mu = 79.2$

Standardabweichung:  
 $\sigma = 3.98$

1 $\sigma$ -Intervall:  
 $p(76 \leq X \leq 83) = 0.6860503$

2 $\sigma$ -Intervall:  
 $p(72 \leq X \leq 87) = 0.95569983$

3 $\sigma$ -Intervall:  
 $p(68 \leq X \leq 91) = 0.9970524$

**p = 0.8**

**n = 100**

<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
0	0	0
1	0	0
2	0	0

3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0

50	0	0
51	0	0
52	0	0
53	0	0
54	0	0
55	1e-8	1e-8
56	3e-8	5e-8
57	1e-7	1.5e-7
58	3e-7	4.4e-7
59	8.5e-7	0.00000129
60	0.00000232	0.00000361
61	0.00000608	0.00000968
62	0.00001529	0.00002497
63	0.00003688	0.00006185
64	0.00008529	0.00014714
65	0.00018895	0.00033609
66	0.0004008	0.00073688
67	0.00081356	0.00155044
68	0.00157926	0.0031297
69	0.00292964	0.00605934
70	0.00518964	0.01124898
71	0.00877123	0.02002021
72	0.01413142	0.03415163
73	0.02168109	0.05583272
74	0.03164267	0.08747538
75	0.04387783	0.13135322
76	0.05773399	0.18908721
77	0.07198004	0.26106725
78	0.08489953	0.34596678
79	0.09457163	0.44053842
80	0.09930021	0.53983863
81	0.09807429	0.63791292
82	0.09089812	0.72881104
83	0.07885138	0.80766242
84	0.06383207	0.87149449
85	0.04806179	0.91955628
86	0.03353148	0.95308776
87	0.02158348	0.97467125
88	0.01275388	0.98742512
89	0.0068785	0.99430362
90	0.00336282	0.99766644
91	0.00147816	0.9991446
92	0.00057841	0.99972301
93	0.00019902	0.99992204
94	0.00005928	0.99998132
95	0.00001498	0.9999963
96	0.00000312	0.99999942

97	5.1e-7	0.99999993
98	6e-8	0.99999999
99	1e-8	1
100	0	1
<b>k</b>	<b>p(X=k)</b>	<b>p(x≤k)</b>
<b>p = 0.8</b>		<b>n = 100</b>
Erwartungswert: $\mu = 80$		
Standardabweichung: $\sigma = 4$		
1σ-Intervall: $p(76 \leq X \leq 84) = 0.74014127$		
2σ-Intervall: $p(72 \leq X \leq 88) = 0.96740492$		
3σ-Intervall: $p(68 \leq X \leq 92) = 0.99817257$		

---

Michael Buhlmann, [www.michael-buhlmann.de](http://www.michael-buhlmann.de) 12.2022