

Fonction de répartition de  $X \sim B(n, p)$ :

$$F_X(x) = \sum_{k=0}^x \binom{n}{k} p^k (1-p)^{n-k} \text{ si } x \in \{0, 1, 2, \dots, n\}$$

		$p$									
$n$	$x$	0.01	0.02	0.03	0.04	0.05	0.10	0.20	0.30	0.40	0.50
2	0	0.980100	0.960400	0.940900	0.921600	0.902500	0.810000	0.640000	0.490000	0.360000	0.250000
	1	0.999900	0.999600	0.999100	0.998400	0.997500	0.990000	0.960000	0.910000	0.840000	0.750000
3	0	0.970299	0.941192	0.912673	0.884736	0.857375	0.729000	0.512000	0.343000	0.216000	0.125000
	1	0.999702	0.998816	0.997354	0.995328	0.992750	0.972000	0.896000	0.784000	0.648000	0.500000
4	0	0.960596	0.922368	0.885293	0.849347	0.814506	0.656100	0.409600	0.240100	0.129600	0.062500
	1	0.999408	0.997664	0.994814	0.990904	0.985981	0.947700	0.819200	0.651700	0.475200	0.312500
5	0	0.950990	0.903921	0.858734	0.815373	0.773781	0.590490	0.327680	0.168070	0.077760	0.031250
	1	0.999020	0.996158	0.991528	0.985242	0.977408	0.918540	0.737280	0.528220	0.336960	0.187500
6	0	0.941480	0.885842	0.832972	0.782758	0.735092	0.531441	0.262144	0.117649	0.046656	0.015625
	1	0.998540	0.994313	0.987544	0.978447	0.967226	0.885735	0.655360	0.420175	0.233280	0.109375
7	0	0.932065	0.868126	0.807983	0.751447	0.698337	0.478297	0.209715	0.082354	0.027994	0.007813
	1	0.997969	0.992143	0.982907	0.970620	0.955619	0.850306	0.576717	0.329417	0.158630	0.062500
8	0	0.922745	0.850763	0.783743	0.721390	0.663420	0.430467	0.167772	0.057648	0.016796	0.003906
	1	0.997310	0.989663	0.977659	0.961853	0.942755	0.813105	0.503316	0.255298	0.106376	0.035156
9	0	0.909946	0.829985	0.759986	0.694920	0.634912	0.394908	0.154918	0.049918	0.014918	0.003906
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
10	0	0.899999	0.819999	0.749999	0.684920	0.624912	0.384908	0.144918	0.039918	0.009918	0.002406
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
11	0	0.889999	0.809999	0.739999	0.674920	0.614912	0.374908	0.134918	0.029918	0.004918	0.001196
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
12	0	0.879999	0.799999	0.729999	0.664920	0.604912	0.364908	0.124918	0.019918	0.000918	0.000246
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
13	0	0.869999	0.789999	0.719999	0.654920	0.594912	0.354908	0.114918	0.009918	0.000096	0.000024
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
14	0	0.859999	0.779999	0.709999	0.644920	0.584912	0.344908	0.104918	0.004918	0.000046	0.000012
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
15	0	0.849999	0.769999	0.699999	0.634920	0.574912	0.334908	0.094918	0.001918	0.000096	0.000024
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
16	0	0.839999	0.759999	0.689999	0.624920	0.564912	0.324908	0.084918	0.000918	0.000046	0.000012
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
17	0	0.829999	0.749999	0.679999	0.614920	0.554912	0.314908	0.074918	0.000418	0.000012	0.000003
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
18	0	0.819999	0.739999	0.669999	0.604920	0.544912	0.304908	0.064918	0.000096	0.000003	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
19	0	0.809999	0.729999	0.659999	0.594920	0.534912	0.294908	0.054918	0.000046	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
20	0	0.800000	0.720000	0.650000	0.584920	0.524912	0.284908	0.044918	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
21	0	0.790000	0.710000	0.640000	0.574920	0.514912	0.274908	0.034918	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
22	0	0.780000	0.700000	0.630000	0.564920	0.504912	0.264908	0.024918	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
23	0	0.770000	0.690000	0.620000	0.554920	0.494912	0.254908	0.014918	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
24	0	0.760000	0.680000	0.610000	0.544920	0.484912	0.244908	0.004918	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
25	0	0.750000	0.670000	0.600000	0.534920	0.474912	0.234908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
26	0	0.740000	0.660000	0.590000	0.524920	0.464912	0.224908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
27	0	0.730000	0.650000	0.580000	0.514920	0.454912	0.214908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
28	0	0.720000	0.640000	0.570000	0.504920	0.444912	0.204908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
29	0	0.710000	0.630000	0.560000	0.494920	0.434912	0.194908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
30	0	0.700000	0.620000	0.550000	0.484920	0.424912	0.184908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
31	0	0.690000	0.610000	0.540000	0.474920	0.414912	0.174908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
32	0	0.680000	0.600000	0.530000	0.464920	0.404912	0.164908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
33	0	0.670000	0.590000	0.520000	0.454920	0.394912	0.154908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
34	0	0.660000	0.580000	0.510000	0.444920	0.384912	0.144908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
35	0	0.650000	0.570000	0.500000	0.434920	0.374912	0.134908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
36	0	0.640000	0.560000	0.490000	0.424920	0.364912	0.124908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
37	0	0.630000	0.550000	0.480000	0.414920	0.354912	0.114908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
38	0	0.620000	0.540000	0.470000	0.404920	0.344912	0.104908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
39	0	0.610000	0.530000	0.460000	0.394920	0.334912	0.094908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
40	0	0.600000	0.520000	0.450000	0.384920	0.324912	0.084908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
41	0	0.590000	0.510000	0.440000	0.374920	0.314912	0.074908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
42	0	0.580000	0.500000	0.430000	0.364920	0.304912	0.064908	0.000000	0.000000	0.000000	0.000000
	1	0.999999	0.999989	0.999949	0.999843	0.999628	0.994976	0.943718	0.805896	0.594086	0.363281
43	0	0.570000	0.490000</								

		$p$										
$n$	$x$	0.01	0.02	0.03	0.04	0.05	0.10	0.20	0.30	0.40	0.50	
20	0	0.817907	0.667608	0.543794	0.442002	0.358486	0.121577	0.011529	0.000798	0.000037	0.000001	
	1	0.983141	0.940101	0.880162	0.810338	0.735840	0.391747	0.069175	0.007637	0.000524	0.000020	
	2	0.998996	0.992931	0.978992	0.956137	0.924516	0.676927	0.206085	0.035483	0.003611	0.000201	
	3	0.999957	0.999400	0.997331	0.992587	0.984098	0.867047	0.411449	0.107087	0.015961	0.001288	
	4	0.999999	0.999961	0.999742	0.999042	0.997426	0.956826	0.629648	0.237508	0.050592	0.005909	
	5	1.000000	0.999998	0.999980	0.999902	0.999671	0.988747	0.804208	0.416371	0.125999	0.020695	
	6		1.000000	0.999999	0.999992	0.999966	0.997614	0.913307	0.608010	0.250011	0.057659	
	7			1.000000	0.999999	0.999997	0.999584	0.967857	0.772722	0.415893	0.131588	
	8				1.000000	1.000000	0.999940	0.990018	0.886669	0.595599	0.251722	
	9						0.999993	0.997405	0.952038	0.755337	0.411901	
10						0.999999	0.999437	0.982855	0.872479	0.588099		
30	0	0.739700	0.545484	0.401007	0.293858	0.214639	0.042391	0.001238	0.000023	0.000000	0.000000	
	1	0.963852	0.879454	0.773075	0.661180	0.553542	0.183695	0.010522	0.000312	0.000005	0.000000	
	2	0.996682	0.978282	0.939931	0.883103	0.812179	0.411351	0.044179	0.002113	0.000047	0.000000	
	3	0.999777	0.997107	0.988095	0.969407	0.939228	0.647439	0.122711	0.009317	0.000313	0.000004	
	4	0.999988	0.999700	0.998150	0.993680	0.984364	0.824505	0.255233	0.030155	0.001510	0.000030	
	5	1.000000	0.999975	0.999767	0.998939	0.996718	0.926810	0.427512	0.076595	0.005659	0.000162	
	6		0.999998	0.999976	0.999852	0.999427	0.974173	0.606970	0.159523	0.017183	0.000715	
	7		1.000000	0.999998	0.999983	0.999915	0.992216	0.760791	0.281377	0.043524	0.002611	
	8			1.000000	0.999998	0.999989	0.997980	0.871349	0.431518	0.094011	0.008062	
	9				1.000000	0.999999	0.999546	0.938913	0.588809	0.176286	0.021387	
10					1.000000	0.999911	0.974384	0.730370	0.291472	0.049369		
40	0	0.668972	0.445700	0.295712	0.195366	0.128512	0.014781	0.000133	0.000001	0.000000	0.000000	
	1	0.939263	0.809537	0.661542	0.520976	0.399064	0.080474	0.001462	0.000012	0.000000	0.000000	
	2	0.992503	0.954330	0.882171	0.785535	0.676736	0.222808	0.007942	0.000103	0.000001	0.000000	
	3	0.999314	0.991759	0.968603	0.925163	0.861850	0.423131	0.028462	0.000598	0.000004	0.000000	
	4	0.999951	0.998825	0.993330	0.978978	0.951972	0.629018	0.075914	0.002561	0.000029	0.000000	
	5	0.999997	0.999863	0.998836	0.995122	0.986123	0.793727	0.161329	0.008618	0.000144	0.000001	
	6	1.000000	0.999987	0.999829	0.999046	0.996608	0.900484	0.285891	0.023761	0.000595	0.000004	
	7		0.999999	0.999979	0.999840	0.999288	0.958098	0.437146	0.055283	0.002053	0.000021	
	8		1.000000	0.999998	0.999977	0.999970	0.984505	0.593127	0.111009	0.006065	0.000091	
	9			1.000000	0.999997	0.999979	0.994937	0.731777	0.195925	0.015573	0.000340	
10				1.000000	0.999997	0.998530	0.839321	0.308743	0.035222	0.001111		
50	0	0.605006	0.364170	0.218065	0.129886	0.076945	0.005154	0.000014	0.000000	0.000000	0.000000	
	1	0.910565	0.735771	0.555280	0.400481	0.279432	0.033786	0.000193	0.000000	0.000000	0.000000	
	2	0.986183	0.921572	0.810798	0.676714	0.540533	0.111729	0.001285	0.000004	0.000000	0.000000	
	3	0.998404	0.982242	0.937240	0.860869	0.760408	0.250294	0.005656	0.000032	0.000000	0.000000	
	4	0.999854	0.996790	0.983189	0.951029	0.896383	0.431198	0.018496	0.000172	0.000000	0.000000	
	5	0.999989	0.999522	0.996264	0.985590	0.962224	0.616123	0.048027	0.000723	0.000003	0.000000	
	6	0.999999	0.999940	0.999296	0.996390	0.988214	0.770227	0.103398	0.002494	0.000014	0.000000	
	7	1.000000	0.999994	0.999886	0.999219	0.996812	0.877855	0.190410	0.007264	0.000061	0.000000	
	8		0.999999	0.999984	0.999852	0.999244	0.942133	0.307332	0.018253	0.000231	0.000001	
	9		1.000000	0.999998	0.999975	0.999841	0.975462	0.443740	0.040232	0.000757	0.000003	
10			1.000000	0.999996	0.999970	0.990645	0.583559	0.078851	0.002197	0.000012		
100	0	0.366032	0.132620	0.047553	0.016870	0.005921	0.000027					
	1	0.735762	0.403272	0.194622	0.087163	0.037081	0.000322					
	2	0.920627	0.676686	0.419775	0.232143	0.118263	0.001945	0.000000				
	3	0.981626	0.858962	0.647249	0.429476	0.257839	0.007836	0.000001				
	4	0.996568	0.949170	0.817855	0.628864	0.435981	0.023711	0.000004				
	5	0.999465	0.984516	0.919163	0.788375	0.615999	0.055757	0.000019				
	6	0.999929	0.995938	0.968772	0.893608	0.766014	0.117156	0.000078				
	7	0.999992	0.999068	0.989376	0.952488	0.872040	0.206051	0.000277				
	8	0.999999	0.999811	0.996784	0.981008	0.936910	0.320874	0.000855				
	9	1.000000	0.999966	0.999126	0.993156	0.971812	0.451290	0.002334	0.000000			
200	0		0.999994	0.999785	0.997761	0.988528	0.583156	0.005696	0.000002			
	1		0.999999	0.999952	0.999332	0.995726	0.703033	0.012575	0.000006			
	2		1.000000	0.999990	0.999817	0.998536	0.801821	0.025329	0.000019			
	3			0.999998	0.999954	0.999537	0.876123	0.046912	0.000057			
	4			1.000000	0.999998	0.999864	0.927427	0.080444	0.000157			
	5				0.999998	0.999963	0.960109	0.128506	0.000405			
	6				1.000000	0.999991	0.979401	0.192338	0.000969	0.000000		
	7					0.999998	0.989993	0.271189	0.002163	0.000001		
	8					0.999999	0.995419	0.362087	0.004523	0.000002		
	9					1.000000	0.998021	0.460161	0.008887	0.000006		
300	0						0.999192	0.559462	0.016463	0.000016		
	1						0.999688	0.654033	0.028831	0.000043		
	2						0.999886	0.738933	0.047866	0.000107		
	3						0.999960	0.810913	0.075531	0.000252		
	4						0.999987	0.868647	0.113570	0.000562		
	5						0.999996	0.912525	0.163130	0.001189	0.000000	
	6						0.999999	0.944167	0.224399	0.002396	0.000001	
	7						1.000000	0.965848	0.296366	0.004600	0.000002	
	8							0.979980	0.376778	0.008433	0.000006	
	9							0.988751	0.462340	0.014775	0.000016	
400	0							0.993941	0.549124	0.024783	0.000039	
	1							0.996870	0.633108	0.039848	0.000092	
	2							0.998450	0.710719	0.061504	0.000204	
	3							0.999263	0.779258	0.091254	0.000437	
	4							0.999664	0.837142	0.130337	0.000895	
	5							0.999853	0.883921	0.179469	0.001759	
	$n$	$x$	0.01	0.02	0.03	0.04	0.05	0.10	0.20	0.30	0.40	0.50
	$p$											