BÅNG HÀM LAPLACE

$$\varphi(x) = \frac{1}{\sqrt{2\pi}} \int_{0}^{x} e^{-t^{2}/2} dt$$

X	0	1	2	3	4	5	6	7	8	9
0.0	0.00000	00399	00798	01197	01596	01994	02393	02791	03189	03586
0.1	03983	04380	04776	05172	05567	05962	06356	06750	07143	07535
0.2	07926	08317	08707	09096	09484	09871	10257	10642	11026	11410
0.3	11791	12172	12552	12930	13308	13683	14058	14431	14803	15174
0.4	15543	15910	16276	16641	17003	17365	17724	18083	18439	18794
0.5	19147	19498	19847	20195	20540	20884	21226	21566	21905	22241
0.6	22575	22907	23237	23566	23892	24216	24538	24857	25175	25491
0.7	25804	26115	26424	26731	27035	27337	27637	27935	28231	28524
0.8	28815	29103	29389	29673	29955	30234	30511	30785	31057	31327
0.9	31594	31859	32122	32382	32639	32895	33147	33398	33646	33891
1.0	34135	34375	34614	34850	35083	35314	35543	35769	35993	36214
1.1	36434	36650	36864	37076	37286	37493	37698	37900	38100	38298
1.2	38493	38686	38877	39065	39251	39435	39617	39796	39973	40148
1.3	40320	40490	40658	40824	40988	41149	41309	41466	41621	41774
1.4	41924	42073	42220	42364	42507	42647	42786	42922	43056	43189
1.5	43319	43448	43575	43699	43822	43943	44062	44179	44295	44408
1.6	44520	44630	44738	44845	44950	45053	45154	45254	45352	45449
1.7	45544	45637	45728	45819	45907	45994	46080	46164	46246	46327
1.8	46407	46485	46562	46638	46712	46784	46856	46926	46995	47062
1.9	47128	47193	47257	47320	47381	47441	47500	47558	47615	47670
2.0	47725	47778	47831	47882	47933	47982	48030	48077	48124	48169
2.1	48214	48257	48300	48341	48382	48422	48461	48500	48537	48574
2.2	48610	48645	48679	48713	48745	48778	48809	48840	48870	48899
2.3	48928	48956	48983	49010	49036	49061	49086	49111	49134	49158
2.4	49180	49202	49224		49266	49286	49305	49324	49343	49361
2.5	49379	49396	49413	49430	49446	49461	49477	49492		49520
2.6	49534	49547	49560	49573	49585	49598	49609	49621	49632	49643
2.7	49653	49664	49674	49683	49693	49702	49711	49720		49736
2.8	49744	49752	49760	49767	49774	49781	49788	49795	49801	49807
2.9	49813	49819	49825	49831	49836	49841	49846	49851	49856	49861
3.0	0.49865		3.1	48903	3.2	49931	3.3	49952	3.4	49966
3.5	49977		3.6	49984	3.7	49989	3.8	49993	3.9	49995
4.0	499968									

BÅNG PHÂN PHỐI STUDENT: $X \sim t(k)$

$$P(|X| > t_{k,\alpha}) = \alpha$$

α	0.20	0.10	0.05	0.02	0.01	0.001
k						
1.	3.078	6.314	12.706	31.820	63.657	636.60
2.	1.886	2.920	4.303	6.965	9.925	31.600
3.	1.638	2.353	3.182	4.541	5.841	12.922
4.	1.533	2.132	2.776	3.747	4.604	8.610
5.	1.476	2.015	2.571	3.365	4.032	6.869
6.	1.440	1.943	2.447	3.143	3.707	5.959
7.	1.415	1.895	2.365	2.998	3.499	5.408
8.	1.397	1.860	2.306	2.896	3.355	5.041
9.	1.383	1.833	2.262	2.821	3.250	4.781
10.	1.372	1.812	2.228	2.764	3.169	4.587
11.	1.363	1.796	2.201	2.718	3.106	4.437

12.	1.356	1.782	2.179	2.681	3.055	4.318
13.	1.350	1.771	2.160	2.650	3.012	4.221
14.	1.345	1.761	2.145	2.624	2.977	4.140
15.	1.341	1.753	2.131	2.602	2.947	4.073
16.	1.337	1.746	2.120	2.583	2.921	4.015
17.	1.333	1.740	2.110	2.567	2.898	3.965
18.	1.330	1.734	2.101	2.552	2.878	3.922
19.	1.328	1.729	2.093	2.539	2.861	3.883
20.	1.325	1.725	2.086	2.528	2.845	3.850
21.	1.323	1.721	2.080	2.518	2.831	3.819
22.	1.321	1.717	2.074	2.508	2.819	3.792
23.	1.319	1.714	2.069	2.500	2.807	3.767
24.	1.318	1.711	2.064	2.492	2.797	3.745
25.	1.316	1.708	2.060	2.485	2.787	3.725
26.	1.315	1.706	2.056	2.479	2.779	3.707
27.	1.314	1.703	2.052	2.473	2.771	3.690
28.	1.313	1.701	2.048	2.467	2.763	3.674
29.	1.311	1.699	2.045	2.462	2.756	3.659
30.	1.282	1.645	1.960	2.326	2.750	3.291

BẢNG PHÂN PHỐI KHI BÌNH PHƯƠNG $X \sim \chi^2(n)$

$$P[X > \chi^2(n,\alpha)] = \alpha$$

n	0.995	0.99	0.975	0.95	0.05	0.025	0.01	0.005
α	0.550	0.,,	0.576	0.50	0.00	0.020	0.01	0.002
1.	0.000039	0.000157	0.00098	0.0039	3.841	5.024	6.635	7.879
	0.00039	0.000137	0.00098	0.0039	5.991	7.378	9.210	10.597
2.	0.0100	0.0201	0.0306	0.103	7.815	9.348	11.345	10.397
3. 4.	0.0717	0.113	0.216	0.332	9.488	9.348	13.277	14.860
4. 5.	0.207	0.297	0.484	1.145	9.488	12.833	15.086	16.749
3.	0.412	0.554	0.831	1.143	11.0/1	12.833	13.080	10.749
6.	0.676	0.872	1.237	1.635	12.592	14.449	16.812	8.548
7.	0.070	1.239	1.169	2.167	14.067	16.013	18.475	20.278
8.	1.344	1.646	2.180	2.733	15.507	17.535	20.090	21.955
9.	1.735	2.088	2.700	3.325	16.919	19.023	21.666	23.590
10.	2.156	2.558	3.247	3.940	18.307	20.483	23.209	25.188
10.	2.130	2.550	3.247	3.740	10.507	20.403	23.207	23.100
11.	2.603	3.053	3.816	4.575	19.675	21.920	24.725	26.758
12.	3.074	3.571	4.404	5.226	21.026	23.337	26.217	28.299
13.	3.565	4.107	5.009	5.892	22.362	24.736	27.688	29.820
14.	4.075	4.660	5.629	6.571	23.685	26.119	29.142	31.320
15.	4.601	5.229	6.262	7.261	24.996	27.489	30.578	32.801
16.	5.142	5.812	6.908	7.962	26.296	28.845	32.000	34.268
17.	5.697	6.408	7.564	8.672	27.587	30.191	33.409	35.717
18.	6.265	7.015	8.231	9.390	28.896	31.526	34.805	37.156
19.	6.844	7.633	8.907	10.117	30.144	32.853	36.191	38.581
20.	7.434	8.260	9.591	10.851	31.410	34.170	37.566	39.997
21.	8.034	8.897	10.283	11.591	32.671	35.479	38.932	41.400
22.	8.643	9.542	10.982	12.338	33.926	36.781	40.289	42.796
23.	9.260	10.196	11.689	13.091	35.172	38.075	41.638	44.184
24.	9.886	10.856	12.401	13.848	36.415	39.364	42.980	45.559
25.	10.520	11.524	13.120	14.611	37.652	40.646	44.314	46.930
26.	11.160	12. 198	13.844	15.379	38.885	41.924	45.643	48.290
27.	11.808	12. 878	14.573	16.151	40.113	43.195	46.963	49.647
28.	12.461	13.565	15.308	16.928	41.337	44.461	48.278	50.994
29.	13.121	14. 256	16.047	17.708	42.557	45.722	49.588	52.338

GIÁO TRÌNH XÁC SUẤT THỐNG KÊ

PHŲ LŲC 1