

	A	B	C	D	E	F	G	H
1	$\int_0^1 \int_0^1 F(x, y) \cdot dx \cdot dy$	$F(x, y) = e^{-(x+y)}$	$\int_0^1 \int_0^1 e^{-(x+y)} \cdot dx \cdot dy = e^{-2} - 2 \cdot e^{-1} + 1 = 0.3995$					
2								
3	<b>MONTE CARLO INTEGRATION:</b>				Exact:	0.399576		
4	<b>PSEUDO RANDOM PAIRS vs. QUASI RANDOM VECTORS</b>							
5				Quasi MC:	Pseudo MC:			
6	vector samples:	100	0.4117886	0.428336253				
7		Relative Error	3.06%	7.20%				
8								
9				Quasi MC:	Pseudo MC:			
10	vector samples:	500	0.4000376	0.406940402				
11		Relative Error	0.12%	1.84%				
12	Quasi (X,Y) Correlation:		0.018339	Pseudo (X,Y) Correlation:	0.037562358			
13	<b>QUASI RANDOM VECTOR</b>			<b>PSEUDO RANDOM NUMBERS</b>				
14	vector#	x	y	F(x,y)	x	y	F(x,y)	
15	1	0.67177038	0.53486069	0.2992036	0.043135228	0.142444	0.830623108	
16	2	0.47790293	0.25660195	0.4797429	0.122860629	0.199302	0.724580636	
17	3	0.82104868	0.32839872	0.3168118	0.376960144	0.13651	0.598415249	
18	4	0.95308304	0.13601985	0.3365183	0.03428155	0.104961	0.870017162	
19	5	0.75416495	0.10131764	0.425078	0.827702327	0.841047	0.188482728	
20	6	0.54897074	0.91685598	0.230887	0.768576648	0.672104	0.236766432	
21	7	0.76931685	0.37064805	0.3198302	0.561854638	0.422223	0.373783792	
22	8	0.56621468	0.90277287	0.2301584	0.102067503	0.290219	0.675510495	
23	9	0.70835031	0.22328095	0.3939106	0.214283086	0.313902	0.589674141	
24	10	0.95604163	0.17587684	0.3224141	0.439915903	0.155985	0.551065828	
25	11	0.10950401	0.40258783	0.5992408	0.833511764	0.000595	0.434262316	
26	12	0.33280871	0.89623688	0.2925717	0.906901057	0.048981	0.384472775	
27	13	0.1276145	0.71177523	0.4319741	0.921268872	0.569109	0.225287504	
28	14	0.38663258	0.57057403	0.383964	0.285758527	0.920817	0.299220327	
29	15	0.98966296	0.82444011	0.162984	0.558981861	0.464889	0.35920176	
30	16	0.90849388	0.65129913	0.2101796	0.690138666	0.248631	0.391108811	
31	17	0.72263566	0.16934085	0.4098449	0.474953716	0.011617	0.614730929	
32	18	0.696157	0.99380753	0.1845261	0.330755193	0.189958	0.594096679	
33	19	0.58259208	0.56541925	0.3172671	0.54622236	0.680494	0.293253984	
34	20	0.44341504	0.28476817	0.4827853	0.173994784	0.318606	0.611035436	
35	21	0.75712354	0.14117463	0.4072622	0.410972497	0.324885	0.479094422	
36	22	0.08093331	0.51046803	0.553551	0.863821781	0.970306	0.159752742	
37	23	0.04348683	0.49877726	0.5814304	0.019708105	0.185678	0.814332721	
38	24	0.58345863	0.88868976	0.229432	0.810099985	0.758075	0.208425139	
39	25	0.05062951	0.97180721	0.3597173	0.180872974	0.548342	0.482287488	
40	26	0.16628647	0.11678197	0.7534682	0.153940722	0.497504	0.521292338	
41	27	0.27393421	0.46545626	0.4774048	0.08371189	0.554939	0.528004453	
42	28	0.77227544	0.41050504	0.3064255	0.121254206	0.466784	0.555415585	
43	29	0.86267924	0.77326244	0.1947689	0.606375566	0.009123	0.540371269	
44	30	0.30337146	0.68084657	0.3737314	0.479778884	0.138183	0.539041991	
45	31	0.4698937	0.46030149	0.3944767	0.45452669	0.834637	0.275501059	
46	32	0.81809009	0.28854173	0.3306708	0.856019763	0.283202	0.320067891	
47	33	0.0535881	0.0116642	0.9368311	0.781520935	0.05477	0.433314874	
48	34	0.1124626	0.44244482	0.5741254	0.706892372	0.495286	0.300538689	
49	35	0.81599805	0.57195525	0.2495856	0.577282851	0.595428	0.309526638	

	A	B	C	D	E	F	G	H
50	36	0.50734018	0.47199226	0.3755617	0.060502496	0.51826	0.560591633	
51	37	0.37739787	0.3809576	0.4684362	0.800534979	0.576829	0.252242608	
52	38	0.44846568	0.04121164	0.6128241	0.563019898	0.737931	0.272272792	
53	39	0.8891579	0.94879576	0.1591428	0.268271291	0.221428	0.612810667	
54	40	0.88201522	0.47576581	0.2572309	0.751327229	0.762384	0.220091706	
55	41	0.32270745	0.38334994	0.4935864	0.943856934	0.199612	0.318711418	
56	42	0.42826314	0.01543776	0.6416573	0.418452757	0.922898	0.261492229	
57	43	0.43627237	0.81173822	0.2870753	0.66930234	0.557446	0.29324468	
58	44	0.41902843	0.82582133	0.2879842	0.81536495	0.923022	0.175803682	
59	45	0.71758502	0.41289738	0.3228775	0.132017028	0.900284	0.356186339	
60	46	0.62508919	0.33355349	0.3834129	0.027530203	0.115615	0.866628102	
61	47	0.79161143	0.11300841	0.4046957	0.34821729	0.679792	0.357718481	
62	48	0.9631843	0.64890679	0.1994701	0.753832594	0.876519	0.195860629	
63	49	0.92155374	0.20404306	0.3244588	0.009614778	0.471648	0.618002431	
64	50	0.00690691	0.810357	0.4416384	0.051785618	0.913263	0.380964588	
65	51	0.29918738	0.24767361	0.5787637	0.47219447	0.499325	0.378507659	
66	52	0.89211649	0.98865275	0.1524728	0.823376273	0.907723	0.177089599	
67	53	0.62718123	0.05013997	0.5079759	0.768474018	0.804982	0.207327315	
68	54	0.04853747	0.25522073	0.7380393	0.722852185	0.272931	0.369434163	
69	55	0.18648901	0.14255585	0.7196107	0.581964505	0.079035	0.516335199	
70	56	0.91354452	0.4077426	0.2667917	0.322080115	0.892056	0.296966392	
71	57	0.21087562	0.60150268	0.4438013	0.917663739	0.358367	0.279142979	
72	58	0.60993729	0.06422308	0.5095841	0.677576049	0.609243	0.276147905	
73	59	0.54601215	0.87699899	0.2409873	0.837380203	0.564372	0.246165193	
74	60	0.9480324	0.37957638	0.2651104	0.479332855	0.929239	0.244492224	
75	61	0.82523276	0.76157167	0.2045783	0.587059112	0.059484	0.523853577	
76	62	0.39673385	0.08346097	0.6186629	0.789032467	0.719548	0.221223896	
77	63	0.1561852	0.60389502	0.4676289	0.34749156	0.736838	0.338128328	
78	64	0.35005266	0.88215377	0.2916484	0.918617676	0.98501	0.149027032	
79	65	0.76722481	0.65406157	0.2414033	0.228498763	0.260778	0.613069443	
80	66	0.36224596	0.11162719	0.6225862	0.429758882	0.302523	0.480810428	
81	67	0.01910021	0.03983042	0.9427722	0.628754122	0.105607	0.479811997	
82	68	0.74197164	0.87184422	0.1991263	0.988501778	0.07009	0.346943922	
83	69	0.11037056	0.72585834	0.4333416	0.316405422	0.011275	0.720593391	
84	70	0.72977833	0.6423708	0.2535614	0.34007897	0.160703	0.606056577	
85	71	0.00899895	0.52694348	0.5851176	0.315604202	0.290403	0.545524431	
86	72	0.55820546	0.10647241	0.5144392	0.051328316	0.785466	0.433096653	
87	73	0.0973107	0.17311441	0.763055	0.787198739	0.617212	0.245511594	
88	74	0.72768629	0.92578432	0.1913845	0.253566558	0.156296	0.663741258	
89	75	0.4261711	0.29885128	0.4843137	0.011826383	0.301407	0.731079533	
90	76	0.13894126	0.61797814	0.4691093	0.537246311	0.35136	0.411228385	
91	77	0.81390601	0.85536877	0.1883836	0.615363648	0.310664	0.396124305	
92	78	0.86686332	0.2064354	0.3418789	0.358057812	0.863525	0.294763288	