

**REPRINTED FROM THE
MECHANICAL
ENGINEERS' HANDBOOK**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649454433

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LIONEL S. MARKS

**REPRINTED FROM THE
MECHANICAL
ENGINEERS' HANDBOOK**

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MECHANICAL ENGINEERS' HANDBOOK

Based on the Hütte and
prepared by a staff of specialists

LIONEL S. MARKS, Editor-in-Chief

Section 1

Mathematical Tables	E. V. Huntington
Weights and Measures	L. A. Fischer

Section 2

Mathematics	E. V. Huntington
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McGraw-Hill Book Company, Inc.

1916

SECTION 1
MATHEMATICAL TABLES
 AND
WEIGHTS AND MEASURES

BY

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SQUARES OF NUMBERS

N	0	1	2	3	4	5	6	7	8	9	Avg. diff.
1.00	1.000	1.002	1.004	1.006	1.008	1.010	1.012	1.014	1.016	1.018	2
1	1.020	1.022	1.024	1.026	1.028	1.030	1.032	1.034	1.036	1.038	
2	1.040	1.042	1.044	1.047	1.049	1.051	1.053	1.055	1.057	1.059	
3	1.061	1.063	1.065	1.067	1.069	1.071	1.073	1.075	1.077	1.080	
4	1.082	1.084	1.086	1.088	1.090	1.092	1.094	1.096	1.098	1.100	
1.08	1.102	1.105	1.107	1.109	1.111	1.113	1.115	1.117	1.119	1.121	
6	1.124	1.126	1.128	1.130	1.132	1.134	1.136	1.138	1.141	1.143	
7	1.145	1.147	1.149	1.151	1.153	1.156	1.158	1.160	1.162	1.164	
8	1.166	1.169	1.171	1.173	1.175	1.177	1.179	1.182	1.184	1.186	
9	1.188	1.190	1.192	1.195	1.197	1.199	1.201	1.203	1.206	1.208	
1.10	1.210	1.212	1.214	1.217	1.219	1.221	1.223	1.225	1.228	1.230	
1	1.232	1.234	1.237	1.239	1.241	1.243	1.245	1.248	1.250	1.252	
2	1.254	1.257	1.259	1.261	1.263	1.266	1.268	1.270	1.272	1.275	
3	1.277	1.279	1.281	1.284	1.286	1.288	1.291	1.293	1.295	1.297	
4	1.300	1.302	1.304	1.306	1.309	1.311	1.313	1.316	1.318	1.320	
1.18	1.322	1.325	1.327	1.329	1.332	1.334	1.336	1.339	1.341	1.343	
6	1.346	1.348	1.350	1.353	1.355	1.357	1.360	1.362	1.364	1.367	
7	1.369	1.371	1.374	1.376	1.378	1.381	1.383	1.385	1.388	1.390	
8	1.392	1.395	1.397	1.399	1.402	1.404	1.407	1.409	1.411	1.414	
9	1.416	1.418	1.421	1.423	1.426	1.428	1.430	1.433	1.435	1.438	
1.20	1.440	1.442	1.445	1.447	1.450	1.452	1.454	1.457	1.459	1.462	
1	1.464	1.467	1.469	1.471	1.474	1.476	1.479	1.481	1.484	1.486	
2	1.488	1.491	1.493	1.496	1.498	1.501	1.503	1.506	1.508	1.510	
3	1.513	1.515	1.518	1.520	1.523	1.525	1.528	1.530	1.533	1.535	
4	1.538	1.540	1.543	1.545	1.548	1.550	1.553	1.555	1.558	1.560	
1.28	1.562	1.565	1.568	1.570	1.573	1.575	1.578	1.580	1.583	1.585	3
6	1.588	1.590	1.593	1.595	1.598	1.600	1.603	1.605	1.608	1.610	
7	1.613	1.615	1.618	1.621	1.623	1.626	1.628	1.631	1.633	1.636	
8	1.638	1.641	1.644	1.646	1.649	1.651	1.654	1.656	1.659	1.662	
9	1.664	1.667	1.669	1.672	1.674	1.677	1.680	1.682	1.685	1.687	
1.30	1.690	1.693	1.695	1.698	1.700	1.703	1.706	1.708	1.711	1.713	
1	1.716	1.719	1.721	1.724	1.727	1.729	1.732	1.734	1.737	1.740	
2	1.742	1.745	1.748	1.750	1.753	1.756	1.758	1.761	1.764	1.766	
3	1.769	1.772	1.774	1.777	1.780	1.782	1.785	1.788	1.790	1.793	
4	1.796	1.798	1.801	1.804	1.806	1.809	1.812	1.814	1.817	1.820	
1.38	1.822	1.825	1.828	1.831	1.833	1.836	1.839	1.841	1.844	1.847	
6	1.850	1.852	1.855	1.858	1.860	1.863	1.866	1.869	1.871	1.874	
7	1.877	1.880	1.882	1.885	1.888	1.891	1.893	1.896	1.899	1.902	
8	1.904	1.907	1.910	1.913	1.915	1.918	1.921	1.924	1.927	1.929	
9	1.932	1.935	1.938	1.940	1.943	1.946	1.949	1.952	1.954	1.957	
1.40	1.960	1.963	1.966	1.968	1.971	1.974	1.977	1.980	1.982	1.985	
1	1.988	1.991	1.994	1.997	1.999	2.002	2.005	2.008	2.011	2.014	
2	2.016	2.019	2.022	2.025	2.028	2.031	2.033	2.036	2.039	2.042	
3	2.045	2.048	2.051	2.053	2.056	2.059	2.062	2.065	2.068	2.071	
4	2.074	2.076	2.079	2.082	2.085	2.088	2.091	2.094	2.097	2.100	
1.48	2.102	2.105	2.108	2.111	2.114	2.117	2.120	2.123	2.126	2.129	
6	2.132	2.135	2.137	2.140	2.143	2.146	2.149	2.152	2.155	2.158	
7	2.161	2.164	2.167	2.170	2.173	2.176	2.179	2.182	2.184	2.187	
8	2.190	2.193	2.196	2.199	2.202	2.205	2.208	2.211	2.214	2.217	
9	2.220	2.223	2.226	2.229	2.232	2.235	2.238	2.241	2.244	2.247	

Moving the decimal point ONE place in *N* requires moving it TWO places in body of table (see p. 6).

MATHEMATICAL TABLES

SQUARES (continued)

N	0	1	2	3	4	5	6	7	8	9
1.80	2.250	2.253	2.256	2.259	2.262	2.265	2.268	2.271	2.274	2.277
1	2.280	2.283	2.286	2.289	2.292	2.295	2.298	2.301	2.304	2.307
2	2.310	2.313	2.316	2.320	2.323	2.326	2.329	2.332	2.335	2.338
3	2.341	2.344	2.347	2.350	2.353	2.356	2.359	2.362	2.365	2.369
4	2.372	2.375	2.378	2.381	2.384	2.387	2.390	2.393	2.396	2.399
1.85	2.402	2.406	2.409	2.412	2.415	2.418	2.421	2.424	2.427	2.430
6	2.434	2.437	2.440	2.443	2.446	2.449	2.452	2.455	2.459	2.462
7	2.465	2.468	2.471	2.474	2.477	2.481	2.484	2.487	2.490	2.493
8	2.496	2.500	2.503	2.506	2.509	2.512	2.515	2.519	2.522	2.525
9	2.528	2.531	2.534	2.538	2.541	2.544	2.547	2.550	2.554	2.557
1.90	2.560	2.563	2.566	2.570	2.573	2.576	2.579	2.582	2.586	2.589
1	2.592	2.595	2.599	2.602	2.605	2.608	2.611	2.615	2.618	2.621
2	2.624	2.628	2.631	2.634	2.637	2.641	2.644	2.647	2.650	2.654
3	2.657	2.660	2.663	2.667	2.670	2.673	2.676	2.680	2.683	2.686
4	2.690	2.693	2.696	2.699	2.703	2.706	2.709	2.713	2.716	2.719
1.95	2.722	2.726	2.729	2.732	2.736	2.739	2.742	2.746	2.749	2.752
6	2.756	2.759	2.762	2.766	2.769	2.772	2.776	2.779	2.782	2.786
7	2.789	2.792	2.796	2.799	2.802	2.806	2.809	2.812	2.816	2.819
8	2.822	2.826	2.829	2.832	2.836	2.839	2.843	2.846	2.849	2.853
9	2.856	2.859	2.863	2.866	2.870	2.873	2.876	2.880	2.883	2.887
1.70	2.890	2.893	2.897	2.900	2.904	2.907	2.910	2.914	2.917	2.921
1	2.924	2.928	2.931	2.934	2.938	2.941	2.945	2.948	2.952	2.955
2	2.956	2.962	2.965	2.969	2.972	2.976	2.979	2.983	2.986	2.989
3	2.993	2.996	3.000	3.003	3.007	3.010	3.014	3.017	3.021	3.024
4	3.028	3.031	3.035	3.038	3.042	3.045	3.049	3.052	3.056	3.059
1.75	3.062	3.066	3.070	3.073	3.077	3.080	3.084	3.087	3.091	3.094
6	3.098	3.101	3.105	3.108	3.112	3.115	3.119	3.122	3.126	3.129
7	3.133	3.136	3.140	3.144	3.147	3.151	3.154	3.158	3.161	3.165
8	3.168	3.172	3.176	3.179	3.183	3.186	3.190	3.193	3.197	3.201
9	3.204	3.208	3.211	3.215	3.218	3.222	3.226	3.229	3.233	3.236
1.80	3.240	3.244	3.247	3.251	3.254	3.258	3.262	3.265	3.269	3.272
1	3.276	3.280	3.283	3.287	3.291	3.294	3.298	3.301	3.305	3.309
2	3.312	3.316	3.320	3.323	3.327	3.331	3.334	3.338	3.342	3.345
3	3.349	3.353	3.356	3.360	3.364	3.367	3.371	3.375	3.378	3.382
4	3.386	3.389	3.393	3.397	3.400	3.404	3.408	3.411	3.415	3.419
1.85	3.422	3.426	3.430	3.434	3.437	3.441	3.445	3.448	3.452	3.456
6	3.460	3.463	3.467	3.471	3.474	3.478	3.482	3.486	3.489	3.493
7	3.497	3.501	3.504	3.508	3.512	3.516	3.519	3.523	3.527	3.531
8	3.534	3.538	3.542	3.546	3.549	3.553	3.557	3.561	3.565	3.568
9	3.572	3.576	3.580	3.583	3.587	3.591	3.595	3.599	3.602	3.606
1.90	3.610	3.614	3.618	3.621	3.625	3.629	3.633	3.637	3.640	3.644
1	3.648	3.652	3.656	3.660	3.663	3.667	3.671	3.675	3.679	3.683
2	3.686	3.690	3.694	3.698	3.702	3.706	3.709	3.713	3.717	3.721
3	3.725	3.729	3.733	3.736	3.740	3.744	3.748	3.752	3.756	3.760
4	3.764	3.767	3.771	3.775	3.779	3.783	3.787	3.791	3.795	3.799
1.95	3.802	3.806	3.810	3.814	3.818	3.822	3.826	3.830	3.834	3.838
6	3.842	3.846	3.849	3.853	3.857	3.861	3.865	3.869	3.873	3.877
7	3.881	3.885	3.889	3.893	3.897	3.901	3.905	3.909	3.912	3.916
8	3.920	3.924	3.928	3.932	3.936	3.940	3.944	3.948	3.952	3.956
9	3.960	3.964	3.968	3.972	3.976	3.980	3.984	3.988	3.992	3.996

$\pi^2 = 9.86960$

$1/\pi^2 = 0.101321$

$e^2 = 7.38906$

SQUARES (continued)

<i>N</i>	0	1	2	3	4	5	6	7	8	9	Ave. diff.
2.00	4.000	4.004	4.008	4.012	4.016	4.020	4.024	4.028	4.032	4.036	4
1	4.040	4.044	4.048	4.052	4.056	4.060	4.064	4.068	4.072	4.076	
2	4.080	4.084	4.088	4.093	4.097	4.101	4.105	4.109	4.113	4.117	
3	4.121	4.125	4.129	4.133	4.137	4.141	4.145	4.149	4.153	4.158	
4	4.162	4.166	4.170	4.174	4.178	4.182	4.186	4.190	4.194	4.198	
2.05	4.202	4.207	4.211	4.215	4.219	4.223	4.227	4.231	4.235	4.239	
6	4.244	4.248	4.252	4.256	4.260	4.264	4.268	4.272	4.277	4.281	
7	4.285	4.289	4.293	4.297	4.301	4.306	4.310	4.314	4.318	4.322	
8	4.326	4.331	4.335	4.339	4.343	4.347	4.351	4.355	4.360	4.364	
9	4.368	4.372	4.376	4.381	4.385	4.389	4.393	4.397	4.402	4.406	
2.10	4.410	4.414	4.418	4.423	4.427	4.431	4.435	4.439	4.444	4.448	
1	4.452	4.456	4.461	4.465	4.469	4.473	4.477	4.482	4.486	4.490	
2	4.494	4.499	4.503	4.507	4.511	4.516	4.520	4.524	4.528	4.533	
3	4.537	4.541	4.545	4.550	4.554	4.558	4.562	4.567	4.571	4.575	
4	4.580	4.584	4.588	4.592	4.597	4.601	4.605	4.610	4.614	4.618	
2.15	4.622	4.627	4.631	4.635	4.640	4.644	4.648	4.653	4.657	4.661	
6	4.666	4.670	4.674	4.679	4.683	4.687	4.692	4.696	4.700	4.705	
7	4.709	4.713	4.718	4.722	4.726	4.731	4.735	4.739	4.744	4.748	
8	4.752	4.757	4.761	4.765	4.770	4.774	4.779	4.783	4.787	4.792	
9	4.796	4.800	4.805	4.809	4.814	4.818	4.822	4.827	4.831	4.836	
2.20	4.840	4.844	4.849	4.853	4.858	4.862	4.866	4.871	4.875	4.880	
1	4.884	4.889	4.893	4.897	4.902	4.906	4.911	4.915	4.920	4.924	
2	4.928	4.933	4.937	4.942	4.946	4.951	4.955	4.960	4.964	4.968	
3	4.973	4.977	4.982	4.986	4.991	4.995	5.000	5.004	5.009	5.013	
4	5.018	5.022	5.027	5.031	5.036	5.040	5.045	5.049	5.054	5.058	
2.25	5.062	5.067	5.072	5.076	5.081	5.085	5.090	5.094	5.099	5.103	5
6	5.108	5.112	5.117	5.121	5.126	5.130	5.135	5.139	5.144	5.148	
7	5.153	5.157	5.162	5.167	5.171	5.176	5.180	5.185	5.189	5.194	
8	5.198	5.203	5.208	5.212	5.217	5.221	5.226	5.230	5.235	5.240	
9	5.244	5.249	5.253	5.258	5.262	5.267	5.272	5.276	5.281	5.285	
2.30	5.290	5.295	5.299	5.304	5.308	5.313	5.318	5.322	5.327	5.331	
1	5.336	5.341	5.345	5.350	5.355	5.359	5.364	5.368	5.373	5.378	
2	5.382	5.387	5.392	5.396	5.401	5.406	5.410	5.415	5.420	5.424	
3	5.429	5.434	5.438	5.443	5.448	5.452	5.457	5.462	5.466	5.471	
4	5.476	5.480	5.485	5.490	5.494	5.499	5.504	5.508	5.513	5.518	
2.35	5.522	5.527	5.532	5.537	5.541	5.546	5.551	5.555	5.560	5.565	
6	5.570	5.574	5.579	5.584	5.588	5.593	5.598	5.603	5.607	5.612	
7	5.617	5.622	5.626	5.631	5.636	5.641	5.645	5.650	5.655	5.660	
8	5.664	5.669	5.674	5.679	5.683	5.688	5.693	5.698	5.703	5.707	
9	5.712	5.717	5.722	5.726	5.731	5.736	5.741	5.746	5.750	5.755	
2.40	5.760	5.765	5.770	5.774	5.779	5.784	5.789	5.794	5.798	5.803	
1	5.808	5.813	5.818	5.823	5.827	5.832	5.837	5.842	5.847	5.852	
2	5.856	5.861	5.866	5.871	5.876	5.881	5.885	5.890	5.895	5.900	
3	5.905	5.910	5.915	5.919	5.924	5.929	5.934	5.939	5.944	5.949	
4	5.954	5.958	5.963	5.968	5.973	5.978	5.983	5.988	5.993	5.998	
2.45	6.002	6.007	6.012	6.017	6.022	6.027	6.032	6.037	6.042	6.047	
6	6.052	6.057	6.061	6.066	6.071	6.076	6.081	6.086	6.091	6.096	
7	6.101	6.106	6.111	6.116	6.121	6.126	6.131	6.136	6.140	6.145	
8	6.150	6.155	6.160	6.165	6.170	6.175	6.180	6.185	6.190	6.195	
9	6.200	6.205	6.210	6.215	6.220	6.225	6.230	6.235	6.240	6.245	

Moving the decimal point ONE place in *N* requires moving it TWO places in body of table (see p. 6).

SQUARES (continued)

N	0	1	2	3	4	5	6	7	8	9	Avg. diff.
6.80	6.250	6.255	6.260	6.265	6.270	6.275	6.280	6.285	6.290	6.295	5
1	6.300	6.305	6.310	6.315	6.320	6.325	6.330	6.335	6.340	6.345	
2	6.350	6.355	6.360	6.366	6.371	6.376	6.381	6.386	6.391	6.396	
3	6.401	6.406	6.411	6.416	6.421	6.426	6.431	6.436	6.441	6.447	
4	6.452	6.457	6.462	6.467	6.472	6.477	6.482	6.487	6.492	6.497	
6.85	6.502	6.508	6.513	6.518	6.523	6.528	6.533	6.538	6.543	6.548	
6	6.554	6.559	6.564	6.569	6.574	6.579	6.584	6.589	6.595	6.600	
7	6.605	6.610	6.615	6.620	6.625	6.631	6.636	6.641	6.646	6.651	
8	6.656	6.662	6.667	6.672	6.677	6.682	6.687	6.693	6.698	6.703	
9	6.708	6.713	6.718	6.724	6.729	6.734	6.739	6.744	6.750	6.755	
6.90	6.760	6.765	6.770	6.776	6.781	6.786	6.791	6.796	6.802	6.807	
1	6.812	6.817	6.823	6.828	6.833	6.838	6.843	6.849	6.854	6.859	
2	6.864	6.870	6.875	6.880	6.885	6.891	6.896	6.901	6.906	6.912	
3	6.917	6.922	6.927	6.933	6.938	6.943	6.948	6.954	6.959	6.964	
4	6.970	6.975	6.980	6.985	6.991	6.996	7.001	7.007	7.012	7.017	
6.95	7.022	7.028	7.033	7.038	7.044	7.049	7.054	7.060	7.065	7.070	
6	7.076	7.081	7.086	7.092	7.097	7.102	7.108	7.113	7.118	7.124	
7	7.129	7.134	7.140	7.145	7.150	7.156	7.161	7.166	7.172	7.177	
8	7.182	7.188	7.193	7.198	7.204	7.209	7.215	7.220	7.225	7.231	
9	7.236	7.241	7.247	7.252	7.258	7.263	7.268	7.274	7.279	7.285	
7.00	7.290	7.295	7.301	7.306	7.312	7.317	7.322	7.328	7.333	7.339	
1	7.344	7.350	7.355	7.360	7.366	7.371	7.377	7.382	7.388	7.393	
2	7.398	7.404	7.409	7.415	7.420	7.426	7.431	7.437	7.442	7.447	
3	7.453	7.458	7.464	7.469	7.475	7.480	7.486	7.491	7.497	7.502	
4	7.508	7.513	7.519	7.524	7.530	7.535	7.541	7.546	7.552	7.557	
7.05	7.562	7.568	7.574	7.579	7.585	7.590	7.596	7.601	7.607	7.612	6
6	7.618	7.623	7.629	7.634	7.640	7.645	7.651	7.656	7.662	7.667	
7	7.673	7.678	7.684	7.690	7.695	7.701	7.706	7.712	7.717	7.723	
8	7.728	7.734	7.740	7.745	7.751	7.756	7.762	7.767	7.773	7.779	
9	7.784	7.790	7.795	7.801	7.806	7.812	7.818	7.823	7.829	7.834	
7.10	7.840	7.846	7.851	7.857	7.862	7.868	7.874	7.879	7.885	7.890	
1	7.896	7.902	7.907	7.913	7.919	7.924	7.930	7.935	7.941	7.947	
2	7.952	7.958	7.964	7.969	7.975	7.981	7.986	7.992	7.998	8.003	
3	8.009	8.015	8.020	8.026	8.032	8.037	8.043	8.049	8.054	8.060	
4	8.066	8.071	8.077	8.083	8.088	8.094	8.100	8.105	8.111	8.117	
7.15	8.122	8.128	8.134	8.140	8.145	8.151	8.157	8.162	8.168	8.174	
6	8.180	8.185	8.191	8.197	8.202	8.208	8.214	8.220	8.225	8.231	
7	8.237	8.243	8.248	8.254	8.260	8.266	8.271	8.277	8.283	8.289	
8	8.294	8.300	8.306	8.312	8.317	8.323	8.329	8.335	8.341	8.346	
9	8.352	8.358	8.364	8.369	8.375	8.381	8.387	8.393	8.398	8.404	
7.20	8.410	8.416	8.422	8.427	8.433	8.439	8.445	8.451	8.456	8.462	
1	8.468	8.474	8.480	8.486	8.491	8.497	8.503	8.509	8.515	8.521	
2	8.526	8.532	8.538	8.544	8.550	8.556	8.561	8.567	8.573	8.579	
3	8.585	8.591	8.597	8.602	8.608	8.614	8.620	8.626	8.632	8.638	
4	8.644	8.649	8.655	8.661	8.667	8.673	8.679	8.685	8.691	8.697	
7.25	8.702	8.708	8.714	8.720	8.726	8.732	8.738	8.744	8.750	8.756	
6	8.762	8.768	8.773	8.779	8.785	8.791	8.797	8.803	8.809	8.815	
7	8.821	8.827	8.833	8.839	8.845	8.851	8.857	8.863	8.868	8.874	
8	8.880	8.886	8.892	8.898	8.904	8.910	8.916	8.922	8.928	8.934	
9	8.940	8.946	8.952	8.958	8.964	8.970	8.976	8.982	8.988	8.994	

$\pi^2 = 9.86960$ $1/\pi^2 = 0.101321$ $e^2 = 7.38905$

SQUARES (continued)

N	0	1	2	3	4	5	6	7	8	9	Avg. diff.	
9.00	9.000	9.006	9.012	9.018	9.024	9.030	9.036	9.042	9.048	9.054	6	
1	9.060	9.066	9.072	9.078	9.084	9.090	9.096	9.102	9.108	9.114		
2	9.120	9.126	9.132	9.139	9.145	9.151	9.157	9.163	9.169	9.175		
3	9.181	9.187	9.193	9.199	9.205	9.211	9.217	9.223	9.229	9.236		
4	9.242	9.248	9.254	9.260	9.266	9.272	9.278	9.284	9.290	9.296		
9.08	9.302	9.309	9.315	9.321	9.327	9.333	9.339	9.345	9.351	9.357		
6	9.364	9.370	9.376	9.382	9.388	9.394	9.400	9.406	9.413	9.419		
7	9.425	9.431	9.437	9.443	9.449	9.456	9.462	9.468	9.474	9.480		
8	9.486	9.493	9.499	9.505	9.511	9.517	9.523	9.530	9.536	9.542		
9	9.548	9.554	9.560	9.567	9.573	9.579	9.585	9.591	9.598	9.604		
9.10	9.610	9.616	9.622	9.629	9.635	9.641	9.647	9.653	9.660	9.666		
1	9.672	9.678	9.685	9.691	9.697	9.703	9.709	9.716	9.722	9.728		
2	9.734	9.741	9.747	9.753	9.759	9.766	9.772	9.778	9.784	9.791		
3	9.797	9.803	9.809	9.816	9.822	9.828	9.834	9.841	9.847	9.853		
4	9.860	9.866	9.872	9.878	9.885	9.891	9.897	9.904	9.910	9.916		
9.18	9.922	9.929	9.935	9.941	9.948	9.954	9.960	9.967	9.973	9.979		
6	9.986	9.992	9.998	10.005								
9.1							9.99	10.05	10.11	10.18		6
2	10.24	10.30	10.37	10.43	10.50	10.56	10.63	10.69	10.76	10.82		7
3	10.89	10.96	11.02	11.09	11.16	11.22	11.29	11.36	11.42	11.49		
4	11.56	11.63	11.70	11.76	11.83	11.90	11.97	12.04	12.11	12.18		
9.2	12.25	12.32	12.39	12.46	12.53	12.60	12.67	12.74	12.82	12.89		
6	12.96	13.03	13.10	13.18	13.25	13.32	13.40	13.47	13.54	13.62		
7	13.69	13.76	13.84	13.91	13.99	14.06	14.14	14.21	14.29	14.36		
8	14.44	14.52	14.59	14.67	14.75	14.82	14.90	14.98	15.05	15.13		
9	15.21	15.29	15.37	15.44	15.52	15.60	15.68	15.76	15.84	15.92		
9.0	16.00	16.09	16.16	16.24	16.32	16.40	16.48	16.56	16.65	16.73		
1	16.81	16.89	16.97	17.06	17.14	17.22	17.31	17.39	17.47	17.56		
2	17.64	17.72	17.81	17.89	17.98	18.06	18.15	18.23	18.32	18.40		
3	18.49	18.58	18.66	18.75	18.84	18.92	19.01	19.10	19.18	19.27		
4	19.36	19.45	19.54	19.62	19.71	19.80	19.89	19.98	20.07	20.16		
9.8	20.25	20.34	20.43	20.52	20.61	20.70	20.79	20.88	20.98	21.07		
6	21.16	21.25	21.34	21.44	21.53	21.62	21.72	21.81	21.90	22.00		
7	22.09	22.18	22.28	22.37	22.47	22.56	22.66	22.75	22.85	22.94		
8	23.04	23.14	23.23	23.33	23.43	23.52	23.62	23.72	23.81	23.91		
9	24.01	24.11	24.21	24.30	24.40	24.50	24.60	24.70	24.80	24.90	10	

$$\pi^2 = 9.86960 \quad (\pi/2)^2 = 2.46740 \quad 1/\pi^2 = 0.101321$$

Explanation of Table of Squares (pp. 2-7).

This table gives the value of N^2 for values of N from 1 to 10, correct to four figures. (Interpolated values may be in error by 1 in the fourth figure).

To find the square of a number N outside the range from 1 to 10, note that moving the decimal point one place in column N is equivalent to moving it two places in the body of the table. For example:

$$(3.217)^2 = 10.35; \quad (0.03217)^2 = 0.001035; \quad (3217)^2 = 10350000$$

This table can also be used inversely, to give square roots.