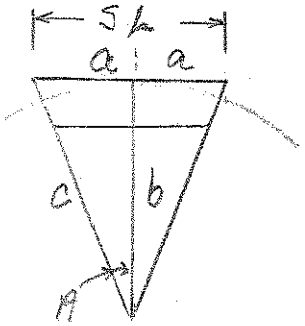
SEGMENTED BOWL DESIGN

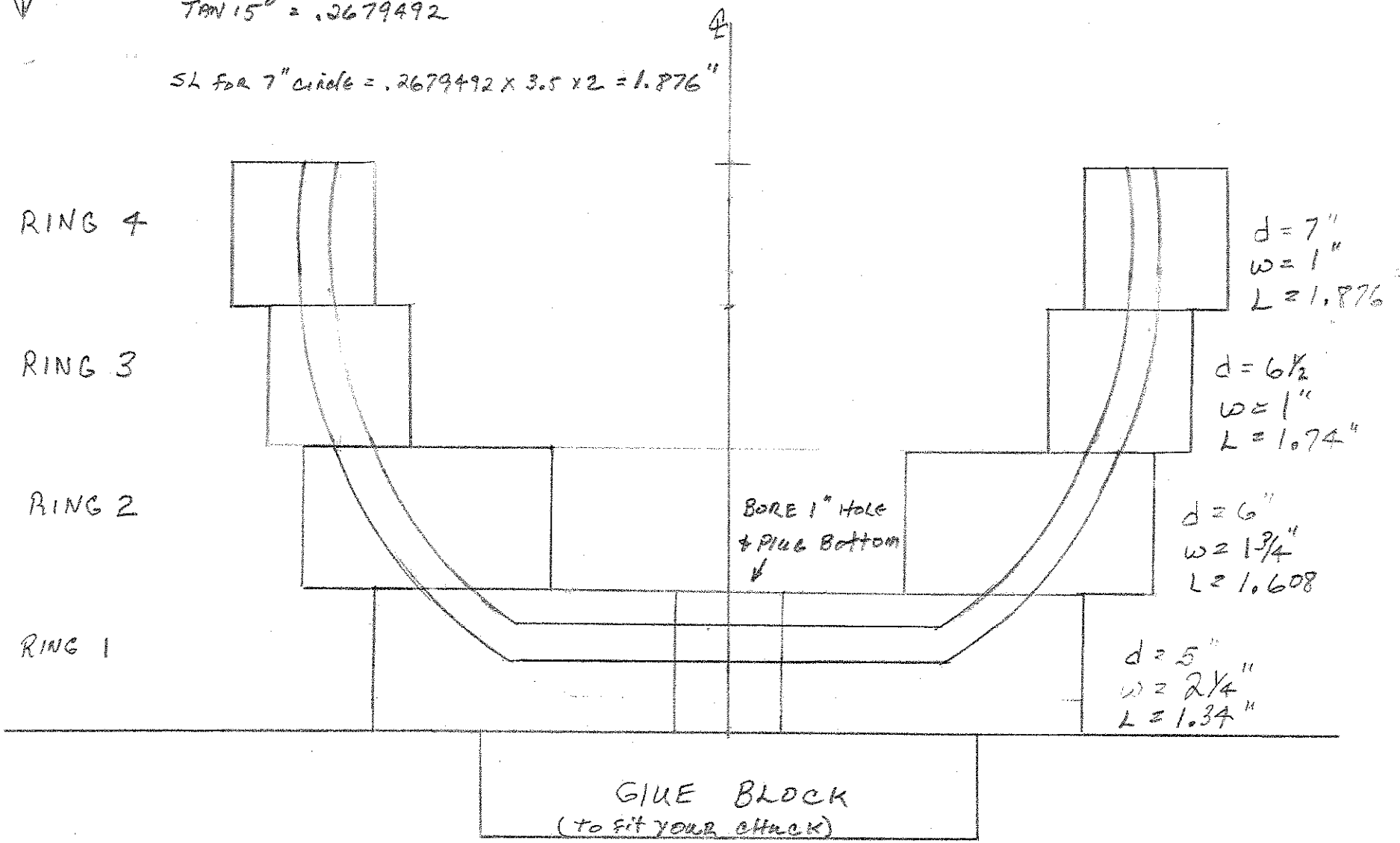


Segment Length SL = 2a = 2(b TAN A)

ANGLE = 180 ÷ NO of segments for 12 segments - ANGLE = 180° ÷ 12 = 15°

TAN 15° = .2679492

SL for 7" circle = .2679492 x 3.5 x 2 = 1.876"



Segemented Bowl Length Sheet

No of Sides	4	6	8	9	10	12	14	15	16	18	20	22	24
Angle	45	30	22.5	20	18	15	12.857	12	11.25	10	9	8.1818	7.5
Circle Size													
3.000	3.000	1.732	1.243	1.092	0.975	0.804	0.685	0.638	0.597	0.529	0.475	0.431	0.395
3.500	3.500	2.021	1.450	1.274	1.137	0.938	0.799	0.744	0.696	0.617	0.554	0.503	0.461
4.000	4.000	2.309	1.657	1.456	1.300	1.072	0.913	0.850	0.796	0.705	0.634	0.575	0.527
4.500	4.500	2.598	1.864	1.638	1.462	1.206	1.027	0.957	0.895	0.793	0.713	0.647	0.592
5.000	5.000	2.887	2.071	1.820	1.625	1.340	1.141	1.063	0.995	0.882	0.792	0.719	0.658
5.500	5.500	3.175	2.278	2.002	1.787	1.474	1.255	1.169	1.094	0.970	0.871	0.791	0.724
6.000	6.000	3.464	2.485	2.184	1.950	1.608	1.369	1.275	1.193	1.058	0.950	0.863	0.790
6.500	6.500	3.753	2.692	2.366	2.112	1.742	1.484	1.382	1.293	1.146	1.029	0.935	0.856
7.000	7.000	4.041	2.899	2.548	2.274	1.876	1.598	1.488	1.392	1.234	1.109	1.006	0.922
7.500	7.500	4.330	3.107	2.730	2.437	2.010	1.712	1.594	1.492	1.322	1.188	1.078	0.987
8.000	8.000	4.619	3.314	2.912	2.599	2.144	1.826	1.700	1.591	1.411	1.267	1.150	1.053
8.500	8.500	4.907	3.521	3.094	2.762	2.278	1.940	1.807	1.691	1.499	1.346	1.222	1.119
9.000	9.000	5.196	3.728	3.276	2.924	2.412	2.054	1.913	1.790	1.587	1.425	1.294	1.185
9.500	9.500	5.485	3.935	3.458	3.087	2.546	2.168	2.019	1.890	1.675	1.505	1.366	1.251
10.000	10.000	5.774	4.142	3.640	3.249	2.679	2.282	2.126	1.989	1.763	1.584	1.438	1.317
10.500	10.500	6.062	4.349	3.822	3.412	2.813	2.397	2.232	2.089	1.851	1.663	1.510	1.382
11.000	11.000	6.351	4.556	4.004	3.574	2.947	2.511	2.338	2.188	1.940	1.742	1.582	1.448
11.500	11.500	6.640	4.763	4.186	3.737	3.081	2.625	2.444	2.287	2.028	1.821	1.653	1.514
12.000	12.000	6.928	4.971	4.368	3.899	3.215	2.739	2.551	2.387	2.116	1.901	1.725	1.580
12.500	12.500	7.217	5.178	4.550	4.061	3.349	2.853	2.657	2.486	2.204	1.980	1.797	1.646
13.000	13.000	7.506	5.385	4.732	4.224	3.483	2.967	2.763	2.586	2.292	2.059	1.869	1.711
13.500	13.500	7.794	5.592	4.914	4.386	3.617	3.081	2.870	2.685	2.380	2.138	1.941	1.777
14.000	14.000	8.083	5.799	5.096	4.549	3.751	3.195	2.976	2.785	2.469	2.217	2.013	1.843
14.500	14.500	8.372	6.006	5.278	4.711	3.885	3.309	3.082	2.884	2.557	2.297	2.085	1.909
15.000	15.000	8.660	6.213	5.460	4.874	4.019	3.424	3.188	2.984	2.645	2.376	2.157	1.975
15.500	15.500	8.949	6.420	5.642	5.036	4.153	3.538	3.295	3.083	2.733	2.455	2.229	2.041
16.000	16.000	9.238	6.627	5.824	5.199	4.287	3.652	3.401	3.183	2.821	2.534	2.300	2.106
16.500	16.500	9.526	6.835	6.006	5.361	4.421	3.766	3.507	3.282	2.909	2.613	2.372	2.172
17.000	17.000	9.815	7.042	6.187	5.524	4.555	3.880	3.613	3.382	2.998	2.693	2.444	2.238
17.500	17.500	10.104	7.249	6.369	5.686	4.689	3.994	3.720	3.481	3.086	2.772	2.516	2.304
18.000	18.000	10.392	7.456	6.551	5.849	4.823	4.108	3.826	3.580	3.174	2.851	2.588	2.370
18.500	18.500	10.681	7.663	6.733	6.011	4.957	4.222	3.932	3.680	3.262	2.930	2.660	2.436
19.000	19.000	10.970	7.870	6.915	6.173	5.091	4.337	4.039	3.779	3.350	3.009	2.732	2.501
20.000	20.000	11.547	8.284	7.279	6.498	5.359	4.565	4.251	3.978	3.527	3.168	2.876	2.633