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2023-03-08(3)T16:27:09.273Z

Cosmic distances [Gly] and times [Ga]

H0: 71 km/s/Mpc, omg[L,M,R,K]: 0.732,0.266,7.701e-5,1.923e-3

z: redshift, rho: correct proper distance, tau: correct lookback time (our frame), plb: proper lookback time, age: observed proper age;
ΛCDM: dC: comoving distance, dM: transverse comoving distance, dA: angular diameter distance, dL: luminosity distance, dT: light-travel distance.

ΛCDM is totally wrong!

z	rho	tau	plb	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.010	0.1370	0.1357	0.1343	13.64	#	0.1374	1.00	0.1374	0.1361	0.1388	0.1368	1.01
0.020	0.2727	0.2674	0.2621	13.51	#	0.2743	1.01	0.2743	0.2689	0.2798	0.2716	1.02
0.030	0.4070	0.3953	0.3838	13.39	#	0.4106	1.01	0.4106	0.3987	0.4230	0.4046	1.02
0.040	0.5399	0.5195	0.4995	13.27	#	0.5464	1.01	0.5464	0.5254	0.5683	0.5358	1.03
0.050	0.6714	0.6402	0.6097	13.16	#	0.6816	1.02	0.6816	0.6491	0.7157	0.6652	1.04
0.060	0.8016	0.7575	0.7146	13.06	#	0.8162	1.02	0.8162	0.7700	0.8652	0.7928	1.05
0.070	0.9304	0.8715	0.8145	12.96	#	0.9503	1.02	0.9503	0.8881	1.017	0.9186	1.05
0.080	1.058	0.9823	0.9096	12.86	#	1.084	1.02	1.084	1.003	1.170	1.043	1.06
0.090	1.184	1.090	1.000	12.77	#	1.217	1.03	1.217	1.116	1.326	1.165	1.07
z	rho	tau	plb	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.100	1.309	1.195	1.086	12.69	#	1.349	1.03	1.349	1.226	1.484	1.286	1.08
0.110	1.432	1.297	1.169	12.60	#	1.481	1.03	1.481	1.334	1.643	1.405	1.08
0.120	1.554	1.396	1.247	12.52	#	1.612	1.04	1.612	1.439	1.805	1.523	1.09
0.130	1.675	1.493	1.321	12.45	#	1.742	1.04	1.742	1.542	1.969	1.639	1.10
0.140	1.794	1.587	1.392	12.38	#	1.872	1.04	1.872	1.642	2.134	1.753	1.10
0.150	1.912	1.679	1.460	12.31	#	2.001	1.05	2.001	1.740	2.302	1.866	1.11
0.160	2.029	1.769	1.525	12.25	#	2.130	1.05	2.130	1.836	2.471	1.978	1.12
0.170	2.145	1.856	1.586	12.19	#	2.258	1.05	2.258	1.930	2.642	2.088	1.13
0.180	2.259	1.941	1.645	12.13	#	2.386	1.06	2.386	2.022	2.815	2.196	1.13
0.190	2.372	2.023	1.700	12.07	#	2.513	1.06	2.513	2.112	2.990	2.303	1.14

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.200	2.483	2.104	1.753	12.02	#	2.639	1.06	2.639	2.199	3.167	2.409	1.14
0.210	2.594	2.183	1.804	11.97	#	2.765	1.07	2.765	2.285	3.345	2.513	1.15
0.220	2.703	2.260	1.852	11.92	#	2.890	1.07	2.890	2.369	3.526	2.616	1.16
0.230	2.811	2.334	1.898	11.87	#	3.014	1.07	3.014	2.451	3.708	2.718	1.16
0.240	2.918	2.408	1.942	11.83	#	3.138	1.08	3.138	2.531	3.891	2.818	1.17
0.250	3.023	2.479	1.983	11.79	#	3.261	1.08	3.262	2.609	4.077	2.917	1.18
0.260	3.127	2.549	2.023	11.75	#	3.384	1.08	3.384	2.686	4.264	3.015	1.18
0.270	3.230	2.617	2.060	11.71	#	3.506	1.09	3.506	2.761	4.453	3.111	1.19
0.280	3.332	2.683	2.096	11.68	#	3.628	1.09	3.628	2.834	4.643	3.207	1.20
0.290	3.433	2.748	2.130	11.64	#	3.748	1.09	3.748	2.906	4.835	3.301	1.20
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.300	3.533	2.811	2.163	11.61	#	3.869	1.10	3.869	2.976	5.029	3.393	1.21
0.310	3.631	2.873	2.193	11.58	#	3.988	1.10	3.988	3.044	5.225	3.485	1.21
0.320	3.728	2.934	2.223	11.55	#	4.107	1.10	4.107	3.111	5.421	3.576	1.22
0.330	3.824	2.993	2.250	11.52	#	4.225	1.10	4.225	3.177	5.620	3.665	1.22
0.340	3.919	3.051	2.277	11.49	#	4.343	1.11	4.343	3.241	5.820	3.753	1.23
0.350	4.013	3.108	2.302	11.47	#	4.460	1.11	4.460	3.304	6.021	3.840	1.24
0.360	4.106	3.163	2.326	11.45	#	4.577	1.11	4.577	3.365	6.225	3.926	1.24
0.370	4.198	3.217	2.348	11.42	#	4.693	1.12	4.693	3.425	6.429	4.011	1.25
0.380	4.288	3.270	2.370	11.40	#	4.808	1.12	4.808	3.484	6.635	4.095	1.25
0.390	4.378	3.322	2.390	11.38	#	4.922	1.12	4.923	3.542	6.843	4.178	1.26
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.400	4.467	3.373	2.409	11.36	#	5.037	1.13	5.037	3.598	7.051	4.259	1.26
0.410	4.554	3.422	2.427	11.34	#	5.150	1.13	5.150	3.653	7.262	4.340	1.27
0.420	4.640	3.471	2.444	11.33	#	5.263	1.13	5.263	3.706	7.474	4.420	1.27
0.430	4.726	3.519	2.461	11.31	#	5.375	1.14	5.375	3.759	7.687	4.499	1.28
0.440	4.810	3.565	2.476	11.30	#	5.487	1.14	5.487	3.810	7.901	4.576	1.28
0.450	4.894	3.611	2.490	11.28	#	5.598	1.14	5.598	3.861	8.117	4.653	1.29
0.460	4.976	3.655	2.504	11.27	#	5.708	1.15	5.708	3.910	8.334	4.729	1.29
0.470	5.058	3.699	2.517	11.26	#	5.818	1.15	5.818	3.958	8.553	4.804	1.30
0.480	5.138	3.742	2.529	11.24	#	5.927	1.15	5.927	4.005	8.773	4.878	1.30
0.490	5.218	3.784	2.540	11.23	#	6.036	1.16	6.036	4.051	8.994	4.951	1.31

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.500	5.297	3.825	2.550	11.22	#	6.144	1.16	6.144	4.096	9.216	5.023	1.31
0.510	5.375	3.866	2.560	11.21	#	6.251	1.16	6.252	4.140	9.440	5.095	1.32
0.520	5.451	3.905	2.569	11.20	#	6.358	1.17	6.358	4.183	9.665	5.165	1.32
0.530	5.527	3.944	2.578	11.19	#	6.464	1.17	6.465	4.225	9.891	5.235	1.33
0.540	5.602	3.982	2.586	11.19	#	6.570	1.17	6.570	4.266	10.12	5.304	1.33
0.550	5.677	4.020	2.593	11.18	#	6.675	1.18	6.675	4.307	10.35	5.372	1.34
0.560	5.750	4.056	2.600	11.17	#	6.779	1.18	6.780	4.346	10.58	5.439	1.34
0.570	5.822	4.092	2.607	11.17	#	6.883	1.18	6.884	4.385	10.81	5.505	1.35
0.580	5.894	4.128	2.612	11.16	#	6.987	1.19	6.987	4.422	11.04	5.571	1.35
0.590	5.965	4.162	2.618	11.15	#	7.089	1.19	7.090	4.459	11.27	5.636	1.35
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.600	6.035	4.196	2.623	11.15	#	7.192	1.19	7.192	4.495	11.51	5.700	1.36
0.610	6.104	4.229	2.627	11.14	#	7.293	1.19	7.294	4.530	11.74	5.763	1.36
0.620	6.172	4.262	2.631	11.14	#	7.394	1.20	7.395	4.565	11.98	5.826	1.37
0.630	6.240	4.294	2.634	11.14	#	7.495	1.20	7.495	4.598	12.22	5.888	1.37
0.640	6.307	4.326	2.638	11.13	#	7.595	1.20	7.595	4.631	12.46	5.949	1.38
0.650	6.373	4.357	2.640	11.13	#	7.694	1.21	7.695	4.663	12.70	6.009	1.38
0.660	6.438	4.387	2.643	11.13	#	7.793	1.21	7.794	4.695	12.94	6.069	1.38
0.670	6.502	4.417	2.645	11.13	#	7.891	1.21	7.892	4.726	13.18	6.128	1.39
0.680	6.566	4.446	2.647	11.13	#	7.989	1.22	7.989	4.756	13.42	6.186	1.39
0.690	6.629	4.475	2.648	11.12	#	8.086	1.22	8.087	4.785	13.67	6.244	1.40
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.700	6.691	4.503	2.649	11.12	#	8.182	1.22	8.183	4.814	13.91	6.301	1.40
0.710	6.753	4.531	2.650	11.12	#	8.278	1.23	8.279	4.842	14.16	6.357	1.40
0.720	6.813	4.558	2.650	11.12	#	8.374	1.23	8.375	4.869	14.40	6.413	1.41
0.730	6.874	4.585	2.650	11.12	#	8.469	1.23	8.470	4.896	14.65	6.468	1.41
0.740	6.933	4.611	2.650	11.12	#	8.563	1.24	8.564	4.922	14.90	6.522	1.41
0.750	6.992	4.637	2.650	11.12	#	8.657	1.24	8.658	4.948	15.15	6.576	1.42
0.760	7.050	4.663	2.649	11.12	#	8.750	1.24	8.752	4.972	15.40	6.629	1.42
0.770	7.107	4.688	2.649	11.12	#	8.843	1.24	8.844	4.997	15.65	6.682	1.43
0.780	7.164	4.713	2.648	11.12	#	8.936	1.25	8.937	5.021	15.91	6.734	1.43
0.790	7.220	4.737	2.646	11.13	#	9.027	1.25	9.029	5.044	16.16	6.785	1.43

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.800	7.276	4.761	2.645	11.13	#	9.119	1.25	9.120	5.067	16.42	6.836	1.44
0.810	7.330	4.784	2.643	11.13	#	9.209	1.26	9.211	5.089	16.67	6.886	1.44
0.820	7.385	4.807	2.641	11.13	#	9.300	1.26	9.301	5.110	16.93	6.936	1.44
0.830	7.438	4.830	2.639	11.13	#	9.389	1.26	9.391	5.132	17.18	6.985	1.45
0.840	7.491	4.852	2.637	11.13	#	9.478	1.27	9.480	5.152	17.44	7.034	1.45
0.850	7.544	4.874	2.635	11.14	#	9.567	1.27	9.569	5.172	17.70	7.082	1.45
0.860	7.596	4.895	2.632	11.14	#	9.655	1.27	9.657	5.192	17.96	7.129	1.46
0.870	7.647	4.917	2.629	11.14	#	9.743	1.27	9.745	5.211	18.22	7.176	1.46
0.880	7.697	4.938	2.626	11.15	#	9.830	1.28	9.832	5.230	18.48	7.223	1.46
0.890	7.747	4.958	2.623	11.15	#	9.917	1.28	9.919	5.248	18.75	7.269	1.47
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
0.900	7.797	4.978	2.620	11.15	#	10.00	1.28	10.01	5.266	19.01	7.315	1.47
0.910	7.846	4.998	2.617	11.15	#	10.09	1.29	10.09	5.283	19.27	7.360	1.47
0.920	7.894	5.018	2.614	11.16	#	10.17	1.29	10.18	5.300	19.54	7.404	1.48
0.930	7.942	5.037	2.610	11.16	#	10.26	1.29	10.26	5.317	19.80	7.448	1.48
0.940	7.990	5.056	2.606	11.17	#	10.34	1.29	10.35	5.333	20.07	7.492	1.48
0.950	8.036	5.075	2.603	11.17	#	10.43	1.30	10.43	5.348	20.34	7.535	1.48
0.960	8.083	5.093	2.599	11.17	#	10.51	1.30	10.51	5.364	20.60	7.577	1.49
0.970	8.129	5.112	2.595	11.18	#	10.59	1.30	10.60	5.378	20.87	7.620	1.49
0.980	8.174	5.129	2.591	11.18	#	10.68	1.31	10.68	5.393	21.14	7.661	1.49
0.990	8.219	5.147	2.586	11.19	#	10.76	1.31	10.76	5.407	21.41	7.703	1.50
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.00	8.263	5.164	2.582	11.19	#	10.84	1.31	10.84	5.421	21.68	7.744	1.50
1.01	8.307	5.181	2.578	11.19	#	10.93	1.32	10.93	5.440	21.98	7.793	1.50
1.02	8.350	5.198	2.573	11.20	#	11.01	1.32	11.01	5.453	22.25	7.833	1.51
1.03	8.393	5.215	2.569	11.20	#	11.09	1.32	11.09	5.465	22.52	7.872	1.51
1.04	8.435	5.231	2.564	11.21	#	11.17	1.32	11.17	5.478	22.80	7.912	1.51
1.05	8.477	5.247	2.560	11.21	#	11.25	1.33	11.25	5.490	23.07	7.950	1.52
1.06	8.519	5.263	2.555	11.22	#	11.33	1.33	11.33	5.501	23.35	7.989	1.52
1.07	8.560	5.279	2.550	11.22	#	11.41	1.33	11.41	5.513	23.62	8.027	1.52
1.08	8.601	5.294	2.545	11.23	#	11.49	1.34	11.49	5.524	23.90	8.064	1.52
1.09	8.641	5.309	2.540	11.23	#	11.56	1.34	11.57	5.534	24.17	8.101	1.53

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.10	8.681	5.324	2.535	11.24	#	11.64	1.34	11.64	5.545	24.45	8.138	1.53
1.11	8.720	5.339	2.530	11.24	#	11.72	1.34	11.72	5.555	24.73	8.175	1.53
1.12	8.759	5.354	2.525	11.25	#	11.79	1.35	11.80	5.565	25.01	8.211	1.53
1.13	8.797	5.368	2.520	11.25	#	11.87	1.35	11.87	5.574	25.29	8.246	1.54
1.14	8.835	5.382	2.515	11.26	#	11.95	1.35	11.95	5.583	25.57	8.282	1.54
1.15	8.873	5.396	2.510	11.26	#	12.02	1.35	12.02	5.592	25.85	8.317	1.54
1.16	8.910	5.410	2.505	11.27	#	12.10	1.36	12.10	5.601	26.13	8.351	1.54
1.17	8.947	5.424	2.499	11.27	#	12.17	1.36	12.17	5.609	26.41	8.386	1.55
1.18	8.984	5.437	2.494	11.28	#	12.24	1.36	12.25	5.618	26.70	8.420	1.55
1.19	9.020	5.450	2.489	11.28	#	12.32	1.37	12.32	5.625	26.98	8.453	1.55
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.20	9.055	5.463	2.483	11.29	#	12.39	1.37	12.39	5.633	27.26	8.486	1.55
1.21	9.091	5.476	2.478	11.29	#	12.46	1.37	12.47	5.640	27.55	8.519	1.56
1.22	9.126	5.489	2.472	11.30	#	12.53	1.37	12.54	5.648	27.83	8.552	1.56
1.23	9.160	5.501	2.467	11.30	#	12.61	1.38	12.61	5.655	28.12	8.584	1.56
1.24	9.195	5.514	2.461	11.31	#	12.68	1.38	12.68	5.661	28.41	8.616	1.56
1.25	9.228	5.526	2.456	11.32	#	12.75	1.38	12.75	5.668	28.69	8.648	1.57
1.26	9.262	5.538	2.450	11.32	#	12.82	1.38	12.82	5.674	28.98	8.679	1.57
1.27	9.295	5.550	2.445	11.33	#	12.89	1.39	12.89	5.680	29.27	8.710	1.57
1.28	9.328	5.561	2.439	11.33	#	12.96	1.39	12.96	5.686	29.56	8.741	1.57
1.29	9.361	5.573	2.434	11.34	#	13.03	1.39	13.03	5.691	29.85	8.771	1.57
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.30	9.393	5.584	2.428	11.34	#	13.10	1.39	13.10	5.697	30.14	8.801	1.58
1.31	9.425	5.595	2.422	11.35	#	13.17	1.40	13.17	5.702	30.43	8.831	1.58
1.32	9.456	5.607	2.417	11.36	#	13.24	1.40	13.24	5.707	30.72	8.861	1.58
1.33	9.487	5.617	2.411	11.36	#	13.30	1.40	13.31	5.711	31.01	8.890	1.58
1.34	9.518	5.628	2.405	11.37	#	13.37	1.40	13.38	5.716	31.30	8.919	1.58
1.35	9.549	5.639	2.400	11.37	#	13.44	1.41	13.44	5.720	31.59	8.948	1.59
1.36	9.579	5.650	2.394	11.38	#	13.51	1.41	13.51	5.725	31.88	8.976	1.59
1.37	9.609	5.660	2.388	11.38	#	13.57	1.41	13.58	5.729	32.18	9.005	1.59
1.38	9.639	5.670	2.382	11.39	#	13.64	1.42	13.64	5.732	32.47	9.032	1.59
1.39	9.668	5.680	2.377	11.39	#	13.70	1.42	13.71	5.736	32.77	9.060	1.59

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.40	9.697	5.690	2.371	11.40	#	13.77	1.42	13.77	5.740	33.06	9.088	1.60
1.41	9.726	5.700	2.365	11.41	#	13.84	1.42	13.84	5.743	33.36	9.115	1.60
1.42	9.755	5.710	2.360	11.41	#	13.90	1.43	13.91	5.746	33.65	9.142	1.60
1.43	9.783	5.720	2.354	11.42	#	13.97	1.43	13.97	5.749	33.95	9.168	1.60
1.44	9.811	5.729	2.348	11.42	#	14.03	1.43	14.03	5.752	34.24	9.195	1.60
1.45	9.838	5.739	2.342	11.43	#	14.09	1.43	14.10	5.754	34.54	9.221	1.61
1.46	9.866	5.748	2.337	11.44	#	14.16	1.43	14.16	5.757	34.84	9.247	1.61
1.47	9.893	5.757	2.331	11.44	#	14.22	1.44	14.23	5.759	35.14	9.272	1.61
1.48	9.920	5.766	2.325	11.45	#	14.28	1.44	14.29	5.761	35.44	9.298	1.61
1.49	9.946	5.775	2.319	11.45	#	14.35	1.44	14.35	5.764	35.73	9.323	1.61
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.50	9.973	5.784	2.314	11.46	#	14.41	1.44	14.41	5.765	36.03	9.348	1.62
1.51	9.999	5.793	2.308	11.46	#	14.47	1.45	14.48	5.767	36.33	9.373	1.62
1.52	10.02	5.802	2.302	11.47	#	14.53	1.45	14.54	5.769	36.63	9.397	1.62
1.53	10.05	5.810	2.296	11.48	#	14.59	1.45	14.60	5.770	36.94	9.422	1.62
1.54	10.08	5.819	2.291	11.48	#	14.65	1.45	14.66	5.772	37.24	9.446	1.62
1.55	10.10	5.827	2.285	11.49	#	14.72	1.46	14.72	5.773	37.54	9.470	1.63
1.56	10.13	5.835	2.279	11.49	#	14.78	1.46	14.78	5.774	37.84	9.493	1.63
1.57	10.15	5.843	2.274	11.50	#	14.84	1.46	14.84	5.775	38.14	9.517	1.63
1.58	10.17	5.851	2.268	11.50	#	14.90	1.46	14.90	5.776	38.45	9.540	1.63
1.59	10.20	5.859	2.262	11.51	#	14.96	1.47	14.96	5.777	38.75	9.563	1.63
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.60	10.22	5.867	2.257	11.52	#	15.01	1.47	15.02	5.777	39.05	9.586	1.63
1.61	10.25	5.875	2.251	11.52	#	15.07	1.47	15.08	5.778	39.36	9.608	1.64
1.62	10.27	5.883	2.245	11.53	#	15.13	1.47	15.14	5.778	39.66	9.631	1.64
1.63	10.29	5.890	2.240	11.53	#	15.19	1.48	15.20	5.778	39.97	9.653	1.64
1.64	10.32	5.898	2.234	11.54	#	15.25	1.48	15.26	5.778	40.27	9.675	1.64
1.65	10.34	5.905	2.228	11.54	#	15.31	1.48	15.31	5.778	40.58	9.697	1.64
1.66	10.36	5.913	2.223	11.55	#	15.36	1.48	15.37	5.778	40.89	9.719	1.64
1.67	10.38	5.920	2.217	11.55	#	15.42	1.49	15.43	5.778	41.19	9.740	1.65
1.68	10.41	5.927	2.212	11.56	#	15.48	1.49	15.48	5.778	41.50	9.761	1.65
1.69	10.43	5.934	2.206	11.57	#	15.54	1.49	15.54	5.778	41.81	9.782	1.65

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.70	10.45	5.941	2.200	11.57	#	15.59	1.49	15.60	5.777	42.11	9.803	1.65
1.71	10.47	5.948	2.195	11.58	#	15.65	1.49	15.65	5.776	42.42	9.824	1.65
1.72	10.49	5.955	2.189	11.58	#	15.70	1.50	15.71	5.776	42.73	9.845	1.65
1.73	10.51	5.962	2.184	11.59	#	15.76	1.50	15.77	5.775	43.04	9.865	1.65
1.74	10.53	5.969	2.178	11.59	#	15.81	1.50	15.82	5.774	43.35	9.885	1.66
1.75	10.55	5.975	2.173	11.60	#	15.87	1.50	15.88	5.773	43.66	9.905	1.66
1.76	10.58	5.982	2.167	11.60	#	15.92	1.51	15.93	5.772	43.97	9.925	1.66
1.77	10.60	5.988	2.162	11.61	#	15.98	1.51	15.99	5.771	44.28	9.945	1.66
1.78	10.62	5.995	2.156	11.62	#	16.03	1.51	16.04	5.770	44.59	9.965	1.66
1.79	10.64	6.001	2.151	11.62	#	16.09	1.51	16.09	5.769	44.90	9.984	1.66
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.80	10.66	6.008	2.146	11.63	#	16.14	1.51	16.15	5.767	45.21	10.00	1.67
1.81	10.68	6.014	2.140	11.63	#	16.19	1.52	16.20	5.766	45.53	10.02	1.67
1.82	10.70	6.020	2.135	11.64	#	16.25	1.52	16.26	5.764	45.84	10.04	1.67
1.83	10.71	6.026	2.129	11.64	#	16.30	1.52	16.31	5.763	46.15	10.06	1.67
1.84	10.73	6.032	2.124	11.65	#	16.35	1.52	16.36	5.761	46.47	10.08	1.67
1.85	10.75	6.038	2.119	11.65	#	16.41	1.53	16.41	5.759	46.78	10.10	1.67
1.86	10.77	6.044	2.113	11.66	#	16.46	1.53	16.47	5.757	47.09	10.12	1.67
1.87	10.79	6.050	2.108	11.66	#	16.51	1.53	16.52	5.755	47.41	10.13	1.67
1.88	10.81	6.056	2.103	11.67	#	16.56	1.53	16.57	5.753	47.72	10.15	1.68
1.89	10.83	6.061	2.097	11.67	#	16.61	1.53	16.62	5.751	48.04	10.17	1.68
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
1.90	10.84	6.067	2.092	11.68	#	16.66	1.54	16.67	5.749	48.35	10.19	1.68
1.91	10.86	6.073	2.087	11.68	#	16.72	1.54	16.72	5.747	48.67	10.20	1.68
1.92	10.88	6.078	2.082	11.69	#	16.77	1.54	16.77	5.745	48.98	10.22	1.68
1.93	10.90	6.084	2.076	11.70	#	16.82	1.54	16.83	5.742	49.30	10.24	1.68
1.94	10.92	6.089	2.071	11.70	#	16.87	1.55	16.88	5.740	49.61	10.26	1.68
1.95	10.93	6.095	2.066	11.71	#	16.92	1.55	16.93	5.738	49.93	10.27	1.69
1.96	10.95	6.100	2.061	11.71	#	16.97	1.55	16.98	5.735	50.25	10.29	1.69
1.97	10.97	6.105	2.056	11.72	#	17.02	1.55	17.03	5.733	50.57	10.31	1.69
1.98	10.98	6.110	2.050	11.72	#	17.07	1.55	17.08	5.730	50.88	10.32	1.69
1.99	11.00	6.116	2.045	11.73	#	17.12	1.56	17.12	5.727	51.20	10.34	1.69

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
2.00	11.02	6.121	2.040	11.73	#	17.16	1.56	17.17	5.724	51.52	10.36	1.69
2.10	11.18	6.169	1.990	11.78	#	17.64	1.58	17.65	5.694	54.72	10.51	1.70
2.20	11.32	6.213	1.942	11.83	#	18.10	1.60	18.11	5.659	57.95	10.66	1.72
2.30	11.46	6.254	1.895	11.88	#	18.54	1.62	18.55	5.621	61.21	10.79	1.73
2.40	11.58	6.290	1.850	11.92	#	18.96	1.64	18.97	5.579	64.49	10.92	1.74
2.50	11.69	6.324	1.807	11.96	#	19.36	1.66	19.37	5.535	67.80	11.04	1.75
2.60	11.80	6.355	1.765	12.01	#	19.75	1.67	19.76	5.489	71.14	11.14	1.75
2.70	11.90	6.383	1.725	12.05	#	20.12	1.69	20.13	5.441	74.49	11.25	1.76
2.80	11.99	6.409	1.687	12.09	#	20.48	1.71	20.49	5.393	77.87	11.34	1.77
2.90	12.07	6.433	1.650	12.12	#	20.82	1.72	20.84	5.343	81.26	11.43	1.78
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
3.00	12.15	6.455	1.614	12.16	#	21.15	1.74	21.17	5.293	84.68	11.52	1.78
3.10	12.23	6.476	1.580	12.19	#	21.47	1.76	21.49	5.242	88.11	11.59	1.79
3.20	12.29	6.496	1.547	12.23	#	21.78	1.77	21.80	5.191	91.57	11.67	1.80
3.30	12.36	6.513	1.515	12.26	#	22.08	1.79	22.10	5.140	95.04	11.74	1.80
3.40	12.42	6.530	1.484	12.29	#	22.37	1.80	22.39	5.089	98.52	11.81	1.81
3.50	12.48	6.546	1.455	12.32	#	22.65	1.82	22.67	5.038	102.0	11.87	1.81
3.60	12.53	6.560	1.426	12.35	#	22.92	1.83	22.94	4.988	105.5	11.93	1.82
3.70	12.58	6.574	1.399	12.37	#	23.18	1.84	23.21	4.937	109.1	11.98	1.82
3.80	12.63	6.587	1.372	12.40	#	23.44	1.86	23.46	4.888	112.6	12.04	1.83
3.90	12.67	6.599	1.347	12.42	#	23.69	1.87	23.71	4.838	116.2	12.09	1.83
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
4.00	12.71	6.610	1.322	12.45	#	23.93	1.88	23.95	4.790	119.7	12.14	1.84
4.10	12.75	6.621	1.298	12.47	#	24.16	1.89	24.18	4.741	123.3	12.18	1.84
4.20	12.79	6.631	1.275	12.50	#	24.38	1.91	24.41	4.694	126.9	12.23	1.84
4.30	12.82	6.641	1.253	12.52	#	24.60	1.92	24.63	4.647	130.5	12.27	1.85
4.40	12.86	6.650	1.231	12.54	#	24.82	1.93	24.84	4.600	134.2	12.31	1.85
4.50	12.89	6.658	1.211	12.56	#	25.02	1.94	25.05	4.555	137.8	12.35	1.85
4.60	12.92	6.666	1.190	12.58	#	25.23	1.95	25.25	4.510	141.4	12.38	1.86
4.70	12.95	6.674	1.171	12.60	#	25.42	1.96	25.45	4.465	145.1	12.42	1.86
4.80	12.98	6.681	1.152	12.62	#	25.62	1.97	25.64	4.421	148.7	12.45	1.86
4.90	13.00	6.688	1.134	12.64	#	25.80	1.98	25.83	4.378	152.4	12.48	1.87

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
5.00	13.03	6.695	1.116	12.66	#	25.98	1.99	26.01	4.335	156.0	12.51	1.87
5.10	13.05	6.701	1.098	12.67	#	26.16	2.00	26.19	4.293	159.7	12.54	1.87
5.20	13.07	6.707	1.082	12.69	#	26.33	2.01	26.36	4.252	163.4	12.56	1.87
5.30	13.09	6.712	1.065	12.71	#	26.50	2.02	26.53	4.211	167.1	12.59	1.88
5.40	13.12	6.718	1.050	12.72	#	26.67	2.03	26.70	4.171	170.9	12.62	1.88
5.50	13.13	6.723	1.034	12.74	#	26.83	2.04	26.86	4.132	174.6	12.64	1.88
5.60	13.15	6.728	1.019	12.75	#	26.99	2.05	27.02	4.094	178.3	12.67	1.88
5.70	13.17	6.732	1.005	12.77	#	27.14	2.06	27.17	4.056	182.1	12.69	1.89
5.80	13.19	6.737	0.9907	12.78	#	27.29	2.07	27.33	4.019	185.8	12.71	1.89
5.90	13.21	6.741	0.9770	12.79	#	27.44	2.08	27.47	3.982	189.6	12.73	1.89
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
6.00	13.22	6.745	0.9636	12.81	#	27.58	2.09	27.62	3.946	193.3	12.76	1.89
6.10	13.24	6.749	0.9506	12.82	#	27.73	2.09	27.76	3.910	197.1	12.78	1.89
6.20	13.25	6.753	0.9379	12.83	#	27.87	2.10	27.90	3.875	200.9	12.80	1.89
6.30	13.26	6.757	0.9256	12.85	#	28.00	2.11	28.04	3.841	204.7	12.81	1.90
6.40	13.28	6.760	0.9135	12.86	#	28.13	2.12	28.17	3.807	208.5	12.83	1.90
6.50	13.29	6.763	0.9018	12.87	#	28.27	2.13	28.30	3.774	212.3	12.85	1.90
6.60	13.30	6.767	0.8903	12.88	#	28.39	2.13	28.43	3.741	216.1	12.87	1.90
6.70	13.31	6.770	0.8792	12.89	#	28.52	2.14	28.56	3.709	219.9	12.88	1.90
6.80	13.33	6.773	0.8683	12.90	#	28.64	2.15	28.68	3.677	223.7	12.90	1.90
6.90	13.34	6.776	0.8577	12.91	#	28.76	2.16	28.80	3.646	227.5	12.91	1.91
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
7.00	13.35	6.778	0.8473	12.92	#	28.88	2.16	28.92	3.615	231.4	12.93	1.91
7.10	13.36	6.781	0.8371	12.93	#	29.00	2.17	29.04	3.585	235.2	12.94	1.91
7.20	13.37	6.783	0.8273	12.94	#	29.11	2.18	29.15	3.555	239.1	12.96	1.91
7.30	13.38	6.786	0.8176	12.95	#	29.22	2.18	29.27	3.526	242.9	12.97	1.91
7.40	13.39	6.788	0.8081	12.96	#	29.33	2.19	29.38	3.497	246.8	12.98	1.91
7.50	13.40	6.791	0.7989	12.97	#	29.44	2.20	29.49	3.469	250.6	13.00	1.91
7.60	13.40	6.793	0.7899	12.98	#	29.55	2.20	29.59	3.441	254.5	13.01	1.92
7.70	13.41	6.795	0.7810	12.99	#	29.65	2.21	29.70	3.414	258.4	13.02	1.92
7.80	13.42	6.797	0.7724	13.00	#	29.76	2.22	29.80	3.387	262.3	13.03	1.92
7.90	13.43	6.799	0.7639	13.01	#	29.86	2.22	29.90	3.360	266.1	13.05	1.92

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
8.00	13.44	6.801	0.7557	13.02	#	29.96	2.23	30.00	3.334	270.0	13.06	1.92
8.10	13.44	6.803	0.7476	13.02	#	30.06	2.24	30.10	3.308	273.9	13.07	1.92
8.20	13.45	6.805	0.7396	13.03	#	30.15	2.24	30.20	3.282	277.8	13.08	1.92
8.30	13.46	6.806	0.7319	13.04	#	30.25	2.25	30.29	3.257	281.7	13.09	1.92
8.40	13.46	6.808	0.7242	13.05	#	30.34	2.25	30.39	3.233	285.6	13.10	1.92
8.50	13.47	6.810	0.7168	13.05	#	30.43	2.26	30.48	3.208	289.5	13.11	1.92
8.60	13.48	6.811	0.7095	13.06	#	30.52	2.26	30.57	3.184	293.5	13.12	1.93
8.70	13.48	6.813	0.7023	13.07	#	30.61	2.27	30.66	3.161	297.4	13.13	1.93
8.80	13.49	6.814	0.6953	13.08	#	30.70	2.28	30.75	3.137	301.3	13.14	1.93
8.90	13.49	6.816	0.6884	13.08	#	30.78	2.28	30.83	3.114	305.2	13.14	1.93
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
9.00	13.50	6.817	0.6817	13.09	#	30.87	2.29	30.92	3.092	309.2	13.15	1.93
9.10	13.50	6.818	0.6751	13.10	#	30.95	2.29	31.00	3.069	313.1	13.16	1.93
9.20	13.51	6.820	0.6686	13.10	#	31.03	2.30	31.08	3.047	317.1	13.17	1.93
9.30	13.51	6.821	0.6622	13.11	#	31.11	2.30	31.17	3.026	321.0	13.18	1.93
9.40	13.52	6.822	0.6560	13.12	#	31.19	2.31	31.25	3.004	325.0	13.18	1.93
9.50	13.52	6.823	0.6498	13.12	#	31.27	2.31	31.33	2.983	328.9	13.19	1.93
9.60	13.53	6.825	0.6438	13.13	#	31.35	2.32	31.40	2.963	332.9	13.20	1.93
9.70	13.53	6.826	0.6379	13.13	#	31.43	2.32	31.48	2.942	336.8	13.21	1.93
9.80	13.54	6.827	0.6321	13.14	#	31.50	2.33	31.56	2.922	340.8	13.21	1.94
9.90	13.54	6.828	0.6264	13.15	#	31.59	2.33	31.64	2.903	344.9	13.23	1.94
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
10.0	13.55	6.829	0.6208	13.15	#	31.66	2.34	31.71	2.883	348.8	13.23	1.94
10.1	13.55	6.830	0.6153	13.16	#	31.73	2.34	31.79	2.864	352.8	13.24	1.94
10.2	13.55	6.831	0.6099	13.16	#	31.80	2.35	31.86	2.844	356.8	13.25	1.94
10.3	13.56	6.832	0.6046	13.17	#	31.87	2.35	31.93	2.825	360.8	13.25	1.94
10.4	13.56	6.833	0.5994	13.17	#	31.94	2.36	32.00	2.807	364.8	13.26	1.94
10.5	13.57	6.834	0.5942	13.18	#	32.01	2.36	32.07	2.788	368.8	13.27	1.94
10.6	13.57	6.835	0.5892	13.18	#	32.08	2.36	32.14	2.770	372.8	13.27	1.94
10.7	13.57	6.836	0.5842	13.19	#	32.15	2.37	32.20	2.752	376.8	13.28	1.94
10.8	13.58	6.836	0.5794	13.19	#	32.21	2.37	32.27	2.735	380.8	13.28	1.94
10.9	13.58	6.837	0.5746	13.20	#	32.28	2.38	32.33	2.717	384.8	13.29	1.94

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
11.0	13.58	6.838	0.5698	13.20	#	32.34	2.38	32.40	2.700	388.8	13.29	1.94
11.1	13.58	6.839	0.5652	13.21	#	32.41	2.39	32.46	2.683	392.8	13.30	1.94
11.2	13.59	6.840	0.5606	13.21	#	32.47	2.39	32.53	2.666	396.8	13.30	1.95
11.3	13.59	6.840	0.5561	13.22	#	32.53	2.39	32.59	2.650	400.8	13.31	1.95
11.4	13.59	6.841	0.5517	13.22	#	32.59	2.40	32.65	2.633	404.9	13.31	1.95
11.5	13.60	6.842	0.5473	13.22	#	32.65	2.40	32.71	2.617	408.9	13.32	1.95
11.6	13.60	6.842	0.5431	13.23	#	32.71	2.41	32.77	2.601	412.9	13.32	1.95
11.7	13.60	6.843	0.5388	13.23	#	32.77	2.41	32.83	2.585	417.0	13.33	1.95
11.8	13.60	6.844	0.5347	13.24	#	32.83	2.41	32.89	2.570	421.0	13.33	1.95
11.9	13.61	6.844	0.5306	13.24	#	32.89	2.42	32.95	2.554	425.0	13.34	1.95
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
12.0	13.61	6.845	0.5265	13.25	#	32.95	2.42	33.01	2.539	429.1	13.34	1.95
12.1	13.61	6.846	0.5226	13.25	#	33.00	2.42	33.06	2.524	433.1	13.35	1.95
12.2	13.61	6.846	0.5187	13.25	#	33.06	2.43	33.12	2.509	437.2	13.35	1.95
12.3	13.62	6.847	0.5148	13.26	#	33.11	2.43	33.17	2.494	441.2	13.35	1.95
12.4	13.62	6.848	0.5110	13.26	#	33.17	2.44	33.23	2.480	445.3	13.36	1.95
12.5	13.62	6.848	0.5073	13.26	#	33.22	2.44	33.28	2.465	449.3	13.36	1.95
12.6	13.62	6.849	0.5036	13.27	#	33.27	2.44	33.34	2.451	453.4	13.37	1.95
12.7	13.63	6.849	0.4999	13.27	#	33.33	2.45	33.39	2.437	457.4	13.37	1.95
12.8	13.63	6.850	0.4964	13.28	#	33.38	2.45	33.44	2.423	461.5	13.37	1.95
12.9	13.63	6.850	0.4928	13.28	#	33.43	2.45	33.49	2.410	465.6	13.38	1.95
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
13.0	13.63	6.851	0.4893	13.28	#	33.48	2.46	33.55	2.396	469.6	13.38	1.95
13.1	13.63	6.851	0.4859	13.29	#	33.53	2.46	33.60	2.383	473.7	13.39	1.95
13.2	13.64	6.852	0.4825	13.29	#	33.58	2.46	33.65	2.370	477.8	13.39	1.95
13.3	13.64	6.852	0.4792	13.29	#	33.63	2.47	33.70	2.356	481.9	13.39	1.95
13.4	13.64	6.853	0.4759	13.30	#	33.68	2.47	33.75	2.343	485.9	13.40	1.95
13.5	13.64	6.853	0.4726	13.30	#	33.73	2.47	33.79	2.331	490.0	13.40	1.96
13.6	13.64	6.854	0.4694	13.30	#	33.78	2.48	33.84	2.318	494.1	13.40	1.96
13.7	13.64	6.854	0.4663	13.31	#	33.83	2.48	33.89	2.306	498.2	13.41	1.96
13.8	13.65	6.854	0.4631	13.31	#	33.87	2.48	33.94	2.293	502.3	13.41	1.96
13.9	13.65	6.855	0.4601	13.31	#	33.92	2.49	33.99	2.281	506.4	13.41	1.96

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
14.0	13.65	6.855	0.4570	13.31	#	33.97	2.49	34.03	2.269	510.5	13.41	1.96
14.1	13.65	6.856	0.4540	13.32	#	34.01	2.49	34.08	2.257	514.6	13.42	1.96
14.2	13.65	6.856	0.4511	13.32	#	34.06	2.49	34.12	2.245	518.7	13.42	1.96
14.3	13.65	6.856	0.4481	13.32	#	34.10	2.50	34.17	2.233	522.8	13.42	1.96
14.4	13.66	6.857	0.4452	13.33	#	34.14	2.50	34.21	2.222	526.9	13.43	1.96
14.5	13.66	6.857	0.4424	13.33	#	34.19	2.50	34.26	2.210	531.0	13.43	1.96
14.6	13.66	6.858	0.4396	13.33	#	34.23	2.51	34.30	2.199	535.1	13.43	1.96
14.7	13.66	6.858	0.4368	13.33	#	34.28	2.51	34.34	2.187	539.2	13.44	1.96
14.8	13.66	6.858	0.4341	13.34	#	34.32	2.51	34.39	2.176	543.3	13.44	1.96
14.9	13.66	6.859	0.4314	13.34	#	34.36	2.51	34.43	2.165	547.4	13.44	1.96
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
15.0	13.66	6.859	0.4287	13.34	#	34.40	2.52	34.47	2.154	551.5	13.44	1.96
15.1	13.67	6.859	0.4260	13.35	#	34.44	2.52	34.51	2.144	555.6	13.45	1.96
15.2	13.67	6.860	0.4234	13.35	#	34.48	2.52	34.55	2.133	559.8	13.45	1.96
15.3	13.67	6.860	0.4209	13.35	#	34.52	2.53	34.59	2.122	563.9	13.45	1.96
15.4	13.67	6.860	0.4183	13.35	#	34.57	2.53	34.63	2.112	568.0	13.45	1.96
15.5	13.67	6.861	0.4158	13.36	#	34.60	2.53	34.68	2.102	572.1	13.46	1.96
15.6	13.67	6.861	0.4133	13.36	#	34.64	2.53	34.71	2.091	576.3	13.46	1.96
15.7	13.67	6.861	0.4108	13.36	#	34.68	2.54	34.75	2.081	580.4	13.46	1.96
15.8	13.67	6.861	0.4084	13.36	#	34.72	2.54	34.79	2.071	584.5	13.46	1.96
15.9	13.68	6.862	0.4060	13.37	#	34.76	2.54	34.83	2.061	588.7	13.46	1.96
z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
16.0	13.68	6.862	0.4036	13.37	#	34.80	2.54	34.87	2.051	592.8	13.47	1.96
16.1	13.68	6.862	0.4013	13.37	#	34.84	2.55	34.91	2.041	596.9	13.47	1.96
16.2	13.68	6.863	0.3990	13.37	#	34.87	2.55	34.95	2.032	601.1	13.47	1.96
16.3	13.68	6.863	0.3967	13.38	#	34.91	2.55	34.98	2.022	605.2	13.47	1.96
16.4	13.68	6.863	0.3944	13.38	#	34.95	2.55	35.02	2.013	609.4	13.48	1.96
16.5	13.68	6.863	0.3922	13.38	#	34.98	2.56	35.06	2.003	613.5	13.48	1.96
16.6	13.68	6.864	0.3900	13.38	#	35.02	2.56	35.09	1.994	617.7	13.48	1.96
16.7	13.68	6.864	0.3878	13.38	#	35.06	2.56	35.13	1.985	621.8	13.48	1.96
16.8	13.69	6.864	0.3856	13.39	#	35.09	2.56	35.17	1.976	626.0	13.48	1.96
16.9	13.69	6.864	0.3835	13.39	#	35.13	2.57	35.20	1.967	630.1	13.49	1.96

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
17.0	13.69	6.865	0.3814	13.39	#	35.16	2.57	35.24	1.958	634.3	13.49	1.96
17.1	13.69	6.865	0.3793	13.39	#	35.20	2.57	35.27	1.949	638.4	13.49	1.97
17.2	13.69	6.865	0.3772	13.39	#	35.23	2.57	35.31	1.940	642.6	13.49	1.97
17.3	13.69	6.865	0.3752	13.40	#	35.27	2.58	35.34	1.931	646.7	13.49	1.97
17.4	13.69	6.866	0.3731	13.40	#	35.30	2.58	35.37	1.923	650.9	13.50	1.97
17.5	13.69	6.866	0.3711	13.40	#	35.33	2.58	35.41	1.914	655.1	13.50	1.97
17.6	13.69	6.866	0.3691	13.40	#	35.37	2.58	35.44	1.905	659.2	13.50	1.97
17.7	13.69	6.866	0.3672	13.40	#	35.40	2.59	35.48	1.897	663.4	13.50	1.97
17.8	13.69	6.866	0.3652	13.41	#	35.43	2.59	35.51	1.889	667.6	13.50	1.97
17.9	13.69	6.867	0.3633	13.41	#	35.47	2.59	35.54	1.880	671.7	13.50	1.97

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
18.0	13.70	6.867	0.3614	13.41	#	35.50	2.59	35.57	1.872	675.9	13.51	1.97
18.1	13.70	6.867	0.3595	13.41	#	35.53	2.59	35.61	1.864	680.1	13.51	1.97
18.2	13.70	6.867	0.3577	13.41	#	35.56	2.60	35.64	1.856	684.2	13.51	1.97
18.3	13.70	6.867	0.3558	13.42	#	35.59	2.60	35.67	1.848	688.4	13.51	1.97
18.4	13.70	6.868	0.3540	13.42	#	35.62	2.60	35.70	1.840	692.6	13.51	1.97
18.5	13.70	6.868	0.3522	13.42	#	35.66	2.60	35.73	1.832	696.8	13.51	1.97
18.6	13.70	6.868	0.3504	13.42	#	35.69	2.60	35.76	1.825	701.0	13.52	1.97
18.7	13.70	6.868	0.3486	13.42	#	35.72	2.61	35.79	1.817	705.1	13.52	1.97
18.8	13.70	6.868	0.3469	13.42	#	35.75	2.61	35.82	1.809	709.3	13.52	1.97
18.9	13.70	6.868	0.3451	13.43	#	35.77	2.61	35.85	1.801	713.4	13.51	1.97

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
19.0	13.70	6.869	0.3434	13.43	#	35.80	2.61	35.88	1.794	717.5	13.52	1.97
19.1	13.70	6.869	0.3417	13.43	#	35.83	2.61	35.91	1.786	721.7	13.52	1.97
19.2	13.70	6.869	0.3400	13.43	#	35.86	2.62	35.94	1.779	725.9	13.52	1.97
19.3	13.71	6.869	0.3384	13.43	#	35.89	2.62	35.97	1.772	730.1	13.52	1.97
19.4	13.71	6.869	0.3367	13.43	#	35.92	2.62	36.00	1.764	734.3	13.52	1.97
19.5	13.71	6.869	0.3351	13.44	#	35.95	2.62	36.02	1.757	738.5	13.52	1.97
19.6	13.71	6.870	0.3335	13.44	#	35.97	2.62	36.05	1.750	742.7	13.52	1.97
19.7	13.71	6.870	0.3319	13.44	#	36.00	2.63	36.08	1.743	746.9	13.53	1.97
19.8	13.71	6.870	0.3303	13.44	#	36.03	2.63	36.11	1.736	751.1	13.53	1.97
19.9	13.71	6.870	0.3287	13.44	#	36.06	2.63	36.14	1.729	755.3	13.53	1.97

z	rho	tau	p1b	age	#	dC	dC/rho	dM	dA	dL	dT	dT/tau
20.0	13.71	6.870	0.3272	13.44	#	36.09	2.63	36.17	1.722	759.5	13.53	1.97

3-spherical conversion from angular size to true size

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z: 0.100:	1":	6 250 ly;	1':	374 988 ly;	1°:	22 499 021 ly
z: 0.100:	2":	12 500 ly;	2':	749 976 ly;	2°:	44 996 477 ly
z: 0.100:	3":	18 749 ly;	3':	1 124 964 ly;	3°:	67 490 802 ly
z: 0.100:	4":	24 999 ly;	4':	1 499 952 ly;	4°:	89 980 432 ly
z: 0.100:	5":	31 249 ly;	5':	1 874 940 ly;	5°:	112 463 801 ly
z: 0.100:	6":	37 499 ly;	6':	2 249 928 ly;	6°:	134 939 345 ly
z: 0.100:	7":	43 749 ly;	7':	2 624 916 ly;	7°:	157 405 499 ly
z: 0.100:	8":	49 998 ly;	8':	2 999 904 ly;	8°:	179 860 697 ly
z: 0.100:	9":	56 248 ly;	9':	3 374 891 ly;	9°:	202 303 377 ly
z: 0.100:	10":	62 498 ly;	10':	3 749 879 ly;	10°:	224 731 972 ly
z: 0.100:	11":	68 748 ly;	11':	4 124 867 ly;	11°:	247 144 920 ly
z: 0.100:	12":	74 998 ly;	12':	4 499 854 ly;	12°:	269 540 657 ly
z: 0.100:	13":	81 247 ly;	13':	4 874 842 ly;	13°:	291 917 619 ly
z: 0.100:	14":	87 497 ly;	14':	5 249 829 ly;	14°:	314 274 243 ly
z: 0.100:	15":	93 747 ly;	15':	5 624 816 ly;	15°:	336 608 966 ly
z: 0.100:	16":	99 997 ly;	16':	5 999 804 ly;	16°:	358 920 227 ly
z: 0.100:	17":	106 247 ly;	17':	6 374 791 ly;	17°:	381 206 463 ly
z: 0.100:	18":	112 496 ly;	18':	6 749 778 ly;	18°:	403 466 112 ly
z: 0.100:	19":	118 746 ly;	19':	7 124 764 ly;	19°:	425 697 614 ly
z: 0.100:	20":	124 996 ly;	20':	7 499 751 ly;	20°:	447 899 408 ly
z: 0.100:	21":	131 246 ly;	21':	7 874 737 ly;	21°:	470 069 935 ly
z: 0.100:	22":	137 496 ly;	22':	8 249 724 ly;	22°:	492 207 634 ly
z: 0.100:	23":	143 745 ly;	23':	8 624 710 ly;	23°:	514 310 948 ly
z: 0.100:	24":	149 995 ly;	24':	8 999 696 ly;	24°:	536 378 318 ly
z: 0.100:	25":	156 245 ly;	25':	9 374 682 ly;	25°:	558 408 187 ly
z: 0.100:	26":	162 495 ly;	26':	9 749 668 ly;	26°:	580 398 999 ly
z: 0.100:	27":	168 745 ly;	27':	10 124 653 ly;	27°:	602 349 197 ly
z: 0.100:	28":	174 994 ly;	28':	10 499 638 ly;	28°:	624 257 226 ly
z: 0.100:	29":	181 244 ly;	29':	10 874 623 ly;	29°:	646 121 533 ly
z: 0.100:	30":	187 494 ly;	30':	11 249 608 ly;	30°:	667 940 565 ly
z: 0.100:	31":	193 744 ly;	31':	11 624 593 ly;	31°:	689 712 768 ly
z: 0.100:	32":	199 994 ly;	32':	11 999 577 ly;	32°:	711 436 592 ly
z: 0.100:	33":	206 243 ly;	33':	12 374 562 ly;	33°:	733 110 486 ly
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z: 0.100:	36":	224 993 ly;	36':	13 499 513 ly;	36°:	797 817 107 ly
z: 0.100:	37":	231 243 ly;	37':	13 874 496 ly;	37°:	819 275 804 ly
z: 0.100:	38":	237 492 ly;	38':	14 249 479 ly;	38°:	840 676 838 ly
z: 0.100:	39":	243 742 ly;	39':	14 624 462 ly;	39°:	862 018 665 ly
z: 0.100:	40":	249 992 ly;	40':	14 999 444 ly;	40°:	883 299 745 ly
z: 0.100:	41":	256 242 ly;	41':	15 374 426 ly;	41°:	904 518 538 ly
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z: 0.100:	43":	268 741 ly;	43':	16 124 389 ly;	43°:	946 763 109 ly
z: 0.100:	44":	274 991 ly;	44':	16 499 370 ly;	44°:	967 785 815 ly
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z: 0.100:	46":	287 491 ly;	46':	17 249 332 ly;	46°:	1 009 624 401 ly
z: 0.100:	47":	293 741 ly;	47':	17 624 312 ly;	47°:	1 030 437 220 ly
z: 0.100:	48":	299 990 ly;	48':	17 999 292 ly;	48°:	1 051 177 019 ly
z: 0.100:	49":	306 240 ly;	49':	18 374 271 ly;	49°:	1 071 842 271 ly
z: 0.100:	50":	312 490 ly;	50':	18 749 251 ly;	50°:	1 092 431 453 ly
z: 0.100:	51":	318 740 ly;	51':	19 124 229 ly;	51°:	1 112 943 043 ly
z: 0.100:	52":	324 990 ly;	52':	19 499 208 ly;	52°:	1 133 375 522 ly
z: 0.100:	53":	331 239 ly;	53':	19 874 186 ly;	53°:	1 153 727 374 ly
z: 0.100:	54":	337 489 ly;	54':	20 249 163 ly;	54°:	1 173 997 083 ly
z: 0.100:	55":	343 739 ly;	55':	20 624 141 ly;	55°:	1 194 183 137 ly
z: 0.100:	56":	349 989 ly;	56':	20 999 118 ly;	56°:	1 214 284 028 ly
z: 0.100:	57":	356 239 ly;	57':	21 374 094 ly;	57°:	1 234 298 248 ly
z: 0.100:	58":	362 488 ly;	58':	21 749 070 ly;	58°:	1 254 224 293 ly
z: 0.100:	59":	368 738 ly;	59':	22 124 046 ly;	59°:	1 274 060 662 ly

z: 0.200:	1":	11 405 ly;	1':	684 288 ly;	1°:	41 056 888 ly
z: 0.200:	2":	22 810 ly;	2':	1 368 575 ly;	2°:	82 111 550 ly
z: 0.200:	3":	34 214 ly;	3':	2 052 863 ly;	3°:	123 161 759 ly
z: 0.200:	4":	45 619 ly;	4':	2 737 150 ly;	4°:	164 205 288 ly
z: 0.200:	5":	57 024 ly;	5':	3 421 438 ly;	5°:	205 239 911 ly
z: 0.200:	6":	68 429 ly;	6':	4 105 726 ly;	6°:	246 263 397 ly
z: 0.200:	7":	79 834 ly;	7':	4 790 013 ly;	7°:	287 273 517 ly
z: 0.200:	8":	91 238 ly;	8':	5 474 300 ly;	8°:	328 268 039 ly
z: 0.200:	9":	102 643 ly;	9':	6 158 588 ly;	9°:	369 244 729 ly
z: 0.200:	10":	114 048 ly;	10':	6 842 875 ly;	10°:	410 201 352 ly
z: 0.200:	11":	125 453 ly;	11':	7 527 162 ly;	11°:	451 135 669 ly
z: 0.200:	12":	136 858 ly;	12':	8 211 449 ly;	12°:	492 045 439 ly
z: 0.200:	13":	148 262 ly;	13':	8 895 736 ly;	13°:	532 928 419 ly
z: 0.200:	14":	159 667 ly;	14':	9 580 022 ly;	14°:	573 782 360 ly
z: 0.200:	15":	171 072 ly;	15':	10 264 309 ly;	15°:	614 605 013 ly
z: 0.200:	16":	182 477 ly;	16':	10 948 595 ly;	16°:	655 394 124 ly
z: 0.200:	17":	193 882 ly;	17':	11 632 882 ly;	17°:	696 147 434 ly
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z: 0.500:	59":	1 172 277 ly;	59':	70 336 488 ly;	59°:	4 194 414 304 ly
z: 0.600:	1":	20 851 ly;	1':	1 251 047 ly;	1°:	75 062 782 ly
z: 0.600:	2":	41 701 ly;	2':	2 502 094 ly;	2°:	150 125 351 ly
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z: 0.600:	4":	83 403 ly;	4':	5 004 188 ly;	4°:	300 248 998 ly
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z: 0.600:	6":	125 105 ly;	6':	7 506 282 ly;	6°:	450 369 235 ly
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z: 0.900:	33":	686 157 ly;	33':	41 169 412 ly;	33°:	2 468 663 802 ly
z: 0.900:	34":	706 950 ly;	34':	42 416 969 ly;	34°:	2 543 373 331 ly
z: 0.900:	35":	727 742 ly;	35':	43 664 527 ly;	35°:	2 618 073 615 ly

z: 0.900:	36":	748 535 ly;	36':	44 912 084 ly;	36°:	2 692 764 318 ly
z: 0.900:	37":	769 328 ly;	37':	46 159 641 ly;	37°:	2 767 445 095 ly
z: 0.900:	38":	790 120 ly;	38':	47 407 199 ly;	38°:	2 842 115 596 ly
z: 0.900:	39":	810 913 ly;	39':	48 654 756 ly;	39°:	2 916 775 464 ly
z: 0.900:	40":	831 705 ly;	40':	49 902 313 ly;	40°:	2 991 424 334 ly
z: 0.900:	41":	852 498 ly;	41':	51 149 870 ly;	41°:	3 066 061 834 ly
z: 0.900:	42":	873 291 ly;	42':	52 397 428 ly;	42°:	3 140 687 585 ly
z: 0.900:	43":	894 083 ly;	43':	53 644 985 ly;	43°:	3 215 301 199 ly
z: 0.900:	44":	914 876 ly;	44':	54 892 542 ly;	44°:	3 289 902 279 ly
z: 0.900:	45":	935 669 ly;	45':	56 140 099 ly;	45°:	3 364 490 421 ly
z: 0.900:	46":	956 461 ly;	46':	57 387 656 ly;	46°:	3 439 065 210 ly
z: 0.900:	47":	977 254 ly;	47':	58 635 213 ly;	47°:	3 513 626 222 ly
z: 0.900:	48":	998 047 ly;	48':	59 882 770 ly;	48°:	3 588 173 024 ly
z: 0.900:	49":	1 018 839 ly;	49':	61 130 326 ly;	49°:	3 662 705 172 ly
z: 0.900:	50":	1 039 632 ly;	50':	62 377 883 ly;	50°:	3 737 222 210 ly
z: 0.900:	51":	1 060 424 ly;	51':	63 625 440 ly;	51°:	3 811 723 673 ly
z: 0.900:	52":	1 081 217 ly;	52':	64 872 996 ly;	52°:	3 886 209 083 ly
z: 0.900:	53":	1 102 010 ly;	53':	66 120 553 ly;	53°:	3 960 677 950 ly
z: 0.900:	54":	1 122 802 ly;	54':	67 368 110 ly;	54°:	4 035 129 771 ly
z: 0.900:	55":	1 143 595 ly;	55':	68 615 666 ly;	55°:	4 109 564 031 ly
z: 0.900:	56":	1 164 388 ly;	56':	69 863 222 ly;	56°:	4 183 980 199 ly
z: 0.900:	57":	1 185 180 ly;	57':	71 110 779 ly;	57°:	4 258 377 732 ly
z: 0.900:	58":	1 205 973 ly;	58':	72 358 335 ly;	58°:	4 332 756 072 ly
z: 0.900:	59":	1 226 765 ly;	59':	73 605 891 ly;	59°:	4 407 114 643 ly
z: 1.00 :	1":	20 210 ly;	1':	1 212 597 ly;	1°:	72 755 735 ly
z: 1.00 :	2":	40 420 ly;	2':	2 425 194 ly;	2°:	145 510 941 ly
z: 1.00 :	3":	60 630 ly;	3':	3 637 791 ly;	3°:	218 265 089 ly
z: 1.00 :	4":	80 840 ly;	4':	4 850 388 ly;	4°:	291 017 648 ly
z: 1.00 :	5":	101 050 ly;	5':	6 062 985 ly;	5°:	363 768 087 ly
z: 1.00 :	6":	121 260 ly;	6':	7 275 582 ly;	6°:	436 515 875 ly
z: 1.00 :	7":	141 470 ly;	7':	8 488 179 ly;	7°:	509 260 478 ly
z: 1.00 :	8":	161 680 ly;	8':	9 700 776 ly;	8°:	582 001 361 ly
z: 1.00 :	9":	181 890 ly;	9':	10 913 373 ly;	9°:	654 737 986 ly
z: 1.00 :	10":	202 099 ly;	10':	12 125 970 ly;	10°:	727 469 813 ly
z: 1.00 :	11":	222 309 ly;	11':	13 338 567 ly;	11°:	800 196 302 ly
z: 1.00 :	12":	242 519 ly;	12':	14 551 164 ly;	12°:	872 916 906 ly
z: 1.00 :	13":	262 729 ly;	13':	15 763 761 ly;	13°:	945 631 077 ly
z: 1.00 :	14":	282 939 ly;	14':	16 976 358 ly;	14°:	1 018 338 264 ly
z: 1.00 :	15":	303 149 ly;	15':	18 188 954 ly;	15°:	1 091 037 909 ly
z: 1.00 :	16":	323 359 ly;	16':	19 401 551 ly;	16°:	1 163 729 455 ly
z: 1.00 :	17":	343 569 ly;	17':	20 614 148 ly;	17°:	1 236 412 335 ly
z: 1.00 :	18":	363 779 ly;	18':	21 826 745 ly;	18°:	1 309 085 981 ly
z: 1.00 :	19":	383 989 ly;	19':	23 039 341 ly;	19°:	1 381 749 818 ly
z: 1.00 :	20":	404 199 ly;	20':	24 251 938 ly;	20°:	1 454 403 266 ly
z: 1.00 :	21":	424 409 ly;	21':	25 464 534 ly;	21°:	1 527 045 740 ly
z: 1.00 :	22":	444 619 ly;	22':	26 677 131 ly;	22°:	1 599 676 648 ly
z: 1.00 :	23":	464 829 ly;	23':	27 889 727 ly;	23°:	1 672 295 390 ly
z: 1.00 :	24":	485 039 ly;	24':	29 102 324 ly;	24°:	1 744 901 362 ly
z: 1.00 :	25":	505 249 ly;	25':	30 314 920 ly;	25°:	1 817 493 951 ly
z: 1.00 :	26":	525 459 ly;	26':	31 527 516 ly;	26°:	1 890 072 536 ly
z: 1.00 :	27":	545 669 ly;	27':	32 740 113 ly;	27°:	1 962 636 489 ly
z: 1.00 :	28":	565 879 ly;	28':	33 952 709 ly;	28°:	2 035 185 172 ly
z: 1.00 :	29":	586 089 ly;	29':	35 165 305 ly;	29°:	2 107 717 941 ly
z: 1.00 :	30":	606 299 ly;	30':	36 377 901 ly;	30°:	2 180 234 139 ly
z: 1.00 :	31":	626 508 ly;	31':	37 590 497 ly;	31°:	2 252 733 102 ly
z: 1.00 :	32":	646 718 ly;	32':	38 803 092 ly;	32°:	2 325 214 155 ly
z: 1.00 :	33":	666 928 ly;	33':	40 015 688 ly;	33°:	2 397 676 612 ly
z: 1.00 :	34":	687 138 ly;	34':	41 228 284 ly;	34°:	2 470 119 776 ly
z: 1.00 :	35":	707 348 ly;	35':	42 440 880 ly;	35°:	2 542 542 939 ly
z: 1.00 :	36":	727 558 ly;	36':	43 653 475 ly;	36°:	2 614 945 379 ly
z: 1.00 :	37":	747 768 ly;	37':	44 866 070 ly;	37°:	2 687 326 365 ly
z: 1.00 :	38":	767 978 ly;	38':	46 078 666 ly;	38°:	2 759 685 149 ly
z: 1.00 :	39":	788 188 ly;	39':	47 291 261 ly;	39°:	2 832 020 972 ly
z: 1.00 :	40":	808 398 ly;	40':	48 503 856 ly;	40°:	2 904 333 059 ly

z: 1.00 :	41" :	828 608 ly;	41' :	49 716 451 ly;	41° :	2 976 620 620 ly
z: 1.00 :	42" :	848 818 ly;	42' :	50 929 046 ly;	42° :	3 048 882 853 ly
z: 1.00 :	43" :	869 028 ly;	43' :	52 141 641 ly;	43° :	3 121 118 935 ly
z: 1.00 :	44" :	889 238 ly;	44' :	53 354 236 ly;	44° :	3 193 328 030 ly
z: 1.00 :	45" :	909 448 ly;	45' :	54 566 830 ly;	45° :	3 265 509 282 ly
z: 1.00 :	46" :	929 658 ly;	46' :	55 779 425 ly;	46° :	3 337 661 820 ly
z: 1.00 :	47" :	949 868 ly;	47' :	56 992 019 ly;	47° :	3 409 784 750 ly
z: 1.00 :	48" :	970 078 ly;	48' :	58 204 614 ly;	48° :	3 481 877 163 ly
z: 1.00 :	49" :	990 288 ly;	49' :	59 417 208 ly;	49° :	3 553 938 126 ly
z: 1.00 :	50" :	1 010 498 ly;	50' :	60 629 802 ly;	50° :	3 625 966 688 ly
z: 1.00 :	51" :	1 030 707 ly;	51' :	61 842 396 ly;	51° :	3 697 961 873 ly
z: 1.00 :	52" :	1 050 917 ly;	52' :	63 054 990 ly;	52° :	3 769 922 685 ly
z: 1.00 :	53" :	1 071 127 ly;	53' :	64 267 583 ly;	53° :	3 841 848 102 ly
z: 1.00 :	54" :	1 091 337 ly;	54' :	65 480 177 ly;	54° :	3 913 737 080 ly
z: 1.00 :	55" :	1 111 547 ly;	55' :	66 692 770 ly;	55° :	3 985 588 547 ly
z: 1.00 :	56" :	1 131 757 ly;	56' :	67 905 364 ly;	56° :	4 057 401 405 ly
z: 1.00 :	57" :	1 151 967 ly;	57' :	69 117 957 ly;	57° :	4 129 174 530 ly
z: 1.00 :	58" :	1 172 177 ly;	58' :	70 330 550 ly;	58° :	4 200 906 768 ly
z: 1.00 :	59" :	1 192 387 ly;	59' :	71 543 143 ly;	59° :	4 272 596 935 ly
z: 1.10 :	1" :	19 494 ly;	1' :	1 169 637 ly;	1° :	70 178 061 ly
z: 1.10 :	2" :	38 988 ly;	2' :	2 339 273 ly;	2° :	140 355 275 ly
z: 1.10 :	3" :	58 482 ly;	3' :	3 508 910 ly;	3° :	210 530 794 ly
z: 1.10 :	4" :	77 976 ly;	4' :	4 678 547 ly;	4° :	280 703 772 ly
z: 1.10 :	5" :	97 470 ly;	5' :	5 848 183 ly;	5° :	350 873 357 ly
z: 1.10 :	6" :	116 964 ly;	6' :	7 017 820 ly;	6° :	421 038 700 ly
z: 1.10 :	7" :	136 458 ly;	7' :	8 187 457 ly;	7° :	491 198 946 ly
z: 1.10 :	8" :	155 952 ly;	8' :	9 357 093 ly;	8° :	561 353 240 ly
z: 1.10 :	9" :	175 446 ly;	9' :	10 526 730 ly;	9° :	631 500 723 ly
z: 1.10 :	10" :	194 939 ly;	10' :	11 696 366 ly;	10° :	701 640 533 ly
z: 1.10 :	11" :	214 433 ly;	11' :	12 866 003 ly;	11° :	771 771 803 ly
z: 1.10 :	12" :	233 927 ly;	12' :	14 035 639 ly;	12° :	841 893 664 ly
z: 1.10 :	13" :	253 421 ly;	13' :	15 205 276 ly;	13° :	912 005 239 ly
z: 1.10 :	14" :	272 915 ly;	14' :	16 374 912 ly;	14° :	982 105 650 ly
z: 1.10 :	15" :	292 409 ly;	15' :	17 544 548 ly;	15° :	1 052 194 008 ly
z: 1.10 :	16" :	311 903 ly;	16' :	18 714 185 ly;	16° :	1 122 269 424 ly
z: 1.10 :	17" :	331 397 ly;	17' :	19 883 821 ly;	17° :	1 192 330 996 ly
z: 1.10 :	18" :	350 891 ly;	18' :	21 053 457 ly;	18° :	1 262 377 821 ly
z: 1.10 :	19" :	370 385 ly;	19' :	22 223 093 ly;	19° :	1 332 408 983 ly
z: 1.10 :	20" :	389 879 ly;	20' :	23 392 729 ly;	20° :	1 402 423 563 ly
z: 1.10 :	21" :	409 373 ly;	21' :	24 562 365 ly;	21° :	1 472 420 629 ly
z: 1.10 :	22" :	428 867 ly;	22' :	25 732 000 ly;	22° :	1 542 399 243 ly
z: 1.10 :	23" :	448 361 ly;	23' :	26 901 636 ly;	23° :	1 612 358 456 ly
z: 1.10 :	24" :	467 855 ly;	24' :	28 071 272 ly;	24° :	1 682 297 310 ly
z: 1.10 :	25" :	487 349 ly;	25' :	29 240 907 ly;	25° :	1 752 214 834 ly
z: 1.10 :	26" :	506 843 ly;	26' :	30 410 543 ly;	26° :	1 822 110 049 ly
z: 1.10 :	27" :	526 337 ly;	27' :	31 580 178 ly;	27° :	1 891 981 962 ly
z: 1.10 :	28" :	545 830 ly;	28' :	32 749 813 ly;	28° :	1 961 829 568 ly
z: 1.10 :	29" :	565 324 ly;	29' :	33 919 448 ly;	29° :	2 031 651 851 ly
z: 1.10 :	30" :	584 818 ly;	30' :	35 089 083 ly;	30° :	2 101 447 779 ly
z: 1.10 :	31" :	604 312 ly;	31' :	36 258 718 ly;	31° :	2 171 216 307 ly
z: 1.10 :	32" :	623 806 ly;	32' :	37 428 353 ly;	32° :	2 240 956 375 ly
z: 1.10 :	33" :	643 300 ly;	33' :	38 597 988 ly;	33° :	2 310 666 909 ly
z: 1.10 :	34" :	662 794 ly;	34' :	39 767 622 ly;	34° :	2 380 346 817 ly
z: 1.10 :	35" :	682 288 ly;	35' :	40 937 256 ly;	35° :	2 449 994 991 ly
z: 1.10 :	36" :	701 782 ly;	36' :	42 106 891 ly;	36° :	2 519 610 306 ly
z: 1.10 :	37" :	721 276 ly;	37' :	43 276 525 ly;	37° :	2 589 191 618 ly
z: 1.10 :	38" :	740 770 ly;	38' :	44 446 159 ly;	38° :	2 658 737 766 ly
z: 1.10 :	39" :	760 264 ly;	39' :	45 615 793 ly;	39° :	2 728 247 568 ly
z: 1.10 :	40" :	779 758 ly;	40' :	46 785 426 ly;	40° :	2 797 719 821 ly
z: 1.10 :	41" :	799 252 ly;	41' :	47 955 060 ly;	41° :	2 867 153 302 ly
z: 1.10 :	42" :	818 746 ly;	42' :	49 124 693 ly;	42° :	2 936 546 767 ly
z: 1.10 :	43" :	838 240 ly;	43' :	50 294 326 ly;	43° :	3 005 898 946 ly
z: 1.10 :	44" :	857 734 ly;	44' :	51 463 959 ly;	44° :	3 075 208 549 ly
z: 1.10 :	45" :	877 228 ly;	45' :	52 633 592 ly;	45° :	3 144 474 258 ly

z: 1.10 :	46":	896 721 ly;	46':	53 803 225 ly;	46°:	3 213 694 732 ly
z: 1.10 :	47":	916 215 ly;	47':	54 972 857 ly;	47°:	3 282 868 603 ly
z: 1.10 :	48":	935 709 ly;	48':	56 142 489 ly;	48°:	3 351 994 475 ly
z: 1.10 :	49":	955 203 ly;	49':	57 312 121 ly;	49°:	3 421 070 924 ly
z: 1.10 :	50":	974 697 ly;	50':	58 481 753 ly;	50°:	3 490 096 496 ly
z: 1.10 :	51":	994 191 ly;	51':	59 651 385 ly;	51°:	3 559 069 707 ly
z: 1.10 :	52":	1 013 685 ly;	52':	60 821 017 ly;	52°:	3 627 989 040 ly
z: 1.10 :	53":	1 033 179 ly;	53':	61 990 648 ly;	53°:	3 696 852 947 ly
z: 1.10 :	54":	1 052 673 ly;	54':	63 160 279 ly;	54°:	3 765 659 846 ly
z: 1.10 :	55":	1 072 167 ly;	55':	64 329 910 ly;	55°:	3 834 408 117 ly
z: 1.10 :	56":	1 091 661 ly;	56':	65 499 540 ly;	56°:	3 903 096 106 ly
z: 1.10 :	57":	1 111 155 ly;	57':	66 669 171 ly;	57°:	3 971 722 121 ly
z: 1.10 :	58":	1 130 649 ly;	58':	67 838 801 ly;	58°:	4 040 284 429 ly
z: 1.10 :	59":	1 150 143 ly;	59':	69 008 431 ly;	59°:	4 108 781 258 ly
z: 1.20 :	1":	18 700 ly;	1':	1 122 016 ly;	1°:	67 320 741 ly
z: 1.20 :	2":	37 401 ly;	2':	2 244 031 ly;	2°:	134 640 325 ly
z: 1.20 :	3":	56 101 ly;	3':	3 366 047 ly;	3°:	201 957 596 ly
z: 1.20 :	4":	74 801 ly;	4':	4 488 062 ly;	4°:	269 271 394 ly
z: 1.20 :	5":	93 501 ly;	5':	5 610 078 ly;	5°:	336 580 561 ly
z: 1.20 :	6":	112 202 ly;	6':	6 732 093 ly;	6°:	403 883 934 ly
z: 1.20 :	7":	130 902 ly;	7':	7 854 109 ly;	7°:	471 180 349 ly
z: 1.20 :	8":	149 602 ly;	8':	8 976 124 ly;	8°:	538 468 638 ly
z: 1.20 :	9":	168 302 ly;	9':	10 098 139 ly;	9°:	605 747 630 ly
z: 1.20 :	10":	187 003 ly;	10':	11 220 155 ly;	10°:	673 016 148 ly
z: 1.20 :	11":	205 703 ly;	11':	12 342 170 ly;	11°:	740 273 014 ly
z: 1.20 :	12":	224 403 ly;	12':	13 464 185 ly;	12°:	807 517 040 ly
z: 1.20 :	13":	243 103 ly;	13':	14 586 200 ly;	13°:	874 747 036 ly
z: 1.20 :	14":	261 804 ly;	14':	15 708 215 ly;	14°:	941 961 802 ly
z: 1.20 :	15":	280 504 ly;	15':	16 830 230 ly;	15°:	1 009 160 135 ly
z: 1.20 :	16":	299 204 ly;	16':	17 952 245 ly;	16°:	1 076 340 821 ly
z: 1.20 :	17":	317 904 ly;	17':	19 074 260 ly;	17°:	1 143 502 640 ly
z: 1.20 :	18":	336 605 ly;	18':	20 196 275 ly;	18°:	1 210 644 361 ly
z: 1.20 :	19":	355 305 ly;	19':	21 318 290 ly;	19°:	1 277 764 747 ly
z: 1.20 :	20":	374 005 ly;	20':	22 440 304 ly;	20°:	1 344 862 549 ly
z: 1.20 :	21":	392 705 ly;	21':	23 562 318 ly;	21°:	1 411 936 506 ly
z: 1.20 :	22":	411 406 ly;	22':	24 684 333 ly;	22°:	1 478 985 350 ly
z: 1.20 :	23":	430 106 ly;	23':	25 806 347 ly;	23°:	1 546 007 797 ly
z: 1.20 :	24":	448 806 ly;	24':	26 928 361 ly;	24°:	1 613 002 553 ly
z: 1.20 :	25":	467 506 ly;	25':	28 050 375 ly;	25°:	1 679 968 311 ly
z: 1.20 :	26":	486 207 ly;	26':	29 172 389 ly;	26°:	1 746 903 750 ly
z: 1.20 :	27":	504 907 ly;	27':	30 294 403 ly;	27°:	1 813 807 534 ly
z: 1.20 :	28":	523 607 ly;	28':	31 416 416 ly;	28°:	1 880 678 311 ly
z: 1.20 :	29":	542 308 ly;	29':	32 538 429 ly;	29°:	1 947 514 718 ly
z: 1.20 :	30":	561 008 ly;	30':	33 660 443 ly;	30°:	2 014 315 369 ly
z: 1.20 :	31":	579 708 ly;	31':	34 782 456 ly;	31°:	2 081 078 866 ly
z: 1.20 :	32":	598 408 ly;	32':	35 904 469 ly;	32°:	2 147 803 791 ly
z: 1.20 :	33":	617 109 ly;	33':	37 026 481 ly;	33°:	2 214 488 707 ly
z: 1.20 :	34":	635 809 ly;	34':	38 148 494 ly;	34°:	2 281 132 158 ly
z: 1.20 :	35":	654 509 ly;	35':	39 270 506 ly;	35°:	2 347 732 669 ly
z: 1.20 :	36":	673 209 ly;	36':	40 392 519 ly;	36°:	2 414 288 743 ly
z: 1.20 :	37":	691 910 ly;	37':	41 514 531 ly;	37°:	2 480 798 860 ly
z: 1.20 :	38":	710 610 ly;	38':	42 636 542 ly;	38°:	2 547 261 480 ly
z: 1.20 :	39":	729 310 ly;	39':	43 758 554 ly;	39°:	2 613 675 037 ly
z: 1.20 :	40":	748 010 ly;	40':	44 880 565 ly;	40°:	2 680 037 943 ly
z: 1.20 :	41":	766 711 ly;	41':	46 002 576 ly;	41°:	2 746 348 581 ly
z: 1.20 :	42":	785 411 ly;	42':	47 124 587 ly;	42°:	2 812 605 311 ly
z: 1.20 :	43":	804 111 ly;	43':	48 246 598 ly;	43°:	2 878 806 466 ly
z: 1.20 :	44":	822 811 ly;	44':	49 368 609 ly;	44°:	2 944 950 349 ly
z: 1.20 :	45":	841 512 ly;	45':	50 490 619 ly;	45°:	3 011 035 234 ly
z: 1.20 :	46":	860 212 ly;	46':	51 612 629 ly;	46°:	3 077 059 365 ly
z: 1.20 :	47":	878 912 ly;	47':	52 734 639 ly;	47°:	3 143 020 957 ly
z: 1.20 :	48":	897 612 ly;	48':	53 856 648 ly;	48°:	3 208 918 188 ly
z: 1.20 :	49":	916 313 ly;	49':	54 978 657 ly;	49°:	3 274 749 207 ly
z: 1.20 :	50":	935 013 ly;	50':	56 100 666 ly;	50°:	3 340 512 127 ly

z: 1.20 :	51":	953 713 ly;	51':	57 222 675 ly;	51°:	3 406 205 023 ly
z: 1.20 :	52":	972 413 ly;	52':	58 344 684 ly;	52°:	3 471 825 936 ly
z: 1.20 :	53":	991 114 ly;	53':	59 466 692 ly;	53°:	3 537 372 868 ly
z: 1.20 :	54":	1 009 814 ly;	54':	60 588 700 ly;	54°:	3 602 843 779 ly
z: 1.20 :	55":	1 028 514 ly;	55':	61 710 707 ly;	55°:	3 668 236 592 ly
z: 1.20 :	56":	1 047 215 ly;	56':	62 832 715 ly;	56°:	3 733 549 185 ly
z: 1.20 :	57":	1 065 915 ly;	57':	63 954 722 ly;	57°:	3 798 779 394 ly
z: 1.20 :	58":	1 084 615 ly;	58':	65 076 728 ly;	58°:	3 863 925 009 ly
z: 1.20 :	59":	1 103 315 ly;	59':	66 198 735 ly;	59°:	3 928 983 773 ly
z: 1.30 :	1":	17 869 ly;	1':	1 072 129 ly;	1°:	64 327 472 ly
z: 1.30 :	2":	35 738 ly;	2':	2 144 257 ly;	2°:	128 653 510 ly
z: 1.30 :	3":	53 606 ly;	3':	3 216 386 ly;	3°:	192 976 676 ly
z: 1.30 :	4":	71 475 ly;	4':	4 288 514 ly;	4°:	257 295 535 ly
z: 1.30 :	5":	89 344 ly;	5':	5 360 642 ly;	5°:	321 608 648 ly
z: 1.30 :	6":	107 213 ly;	6':	6 432 771 ly;	6°:	385 914 574 ly
z: 1.30 :	7":	125 082 ly;	7':	7 504 899 ly;	7°:	450 211 869 ly
z: 1.30 :	8":	142 950 ly;	8':	8 577 028 ly;	8°:	514 499 085 ly
z: 1.30 :	9":	160 819 ly;	9':	9 649 156 ly;	9°:	578 774 771 ly
z: 1.30 :	10":	178 688 ly;	10':	10 721 284 ly;	10°:	643 037 471 ly
z: 1.30 :	11":	196 557 ly;	11':	11 793 412 ly;	11°:	707 285 724 ly
z: 1.30 :	12":	214 426 ly;	12':	12 865 540 ly;	12°:	771 518 061 ly
z: 1.30 :	13":	232 295 ly;	13':	13 937 668 ly;	13°:	835 733 008 ly
z: 1.30 :	14":	250 163 ly;	14':	15 009 796 ly;	14°:	899 929 085 ly
z: 1.30 :	15":	268 032 ly;	15':	16 081 924 ly;	15°:	964 104 803 ly
z: 1.30 :	16":	285 901 ly;	16':	17 154 052 ly;	16°:	1 028 258 663 ly
z: 1.30 :	17":	303 770 ly;	17':	18 226 180 ly;	17°:	1 092 389 160 ly
z: 1.30 :	18":	321 639 ly;	18':	19 298 307 ly;	18°:	1 156 494 777 ly
z: 1.30 :	19":	339 507 ly;	19':	20 370 434 ly;	19°:	1 220 573 989 ly
z: 1.30 :	20":	357 376 ly;	20':	21 442 562 ly;	20°:	1 284 625 257 ly
z: 1.30 :	21":	375 245 ly;	21':	22 514 689 ly;	21°:	1 348 647 033 ly
z: 1.30 :	22":	393 114 ly;	22':	23 586 816 ly;	22°:	1 412 637 755 ly
z: 1.30 :	23":	410 983 ly;	23':	24 658 943 ly;	23°:	1 476 595 849 ly
z: 1.30 :	24":	428 851 ly;	24':	25 731 069 ly;	24°:	1 540 519 728 ly
z: 1.30 :	25":	446 720 ly;	25':	26 803 196 ly;	25°:	1 604 407 790 ly
z: 1.30 :	26":	464 589 ly;	26':	27 875 322 ly;	26°:	1 668 258 416 ly
z: 1.30 :	27":	482 458 ly;	27':	28 947 448 ly;	27°:	1 732 069 974 ly
z: 1.30 :	28":	500 327 ly;	28':	30 019 574 ly;	28°:	1 795 840 814 ly
z: 1.30 :	29":	518 195 ly;	29':	31 091 700 ly;	29°:	1 859 569 270 ly
z: 1.30 :	30":	536 064 ly;	30':	32 163 826 ly;	30°:	1 923 253 656 ly
z: 1.30 :	31":	553 933 ly;	31':	33 235 951 ly;	31°:	1 986 892 271 ly
z: 1.30 :	32":	571 802 ly;	32':	34 308 077 ly;	32°:	2 050 483 389 ly
z: 1.30 :	33":	589 671 ly;	33':	35 380 202 ly;	33°:	2 114 025 269 ly
z: 1.30 :	34":	607 539 ly;	34':	36 452 326 ly;	34°:	2 177 516 145 ly
z: 1.30 :	35":	625 408 ly;	35':	37 524 451 ly;	35°:	2 240 954 232 ly
z: 1.30 :	36":	643 277 ly;	36':	38 596 575 ly;	36°:	2 304 337 720 ly
z: 1.30 :	37":	661 146 ly;	37':	39 668 699 ly;	37°:	2 367 664 776 ly
z: 1.30 :	38":	679 015 ly;	38':	40 740 823 ly;	38°:	2 430 933 544 ly
z: 1.30 :	39":	696 884 ly;	39':	41 812 947 ly;	39°:	2 494 142 140 ly
z: 1.30 :	40":	714 752 ly;	40':	42 885 070 ly;	40°:	2 557 288 655 ly
z: 1.30 :	41":	732 621 ly;	41':	43 957 193 ly;	41°:	2 620 371 154 ly
z: 1.30 :	42":	750 490 ly;	42':	45 029 316 ly;	42°:	2 683 387 671 ly
z: 1.30 :	43":	768 359 ly;	43':	46 101 439 ly;	43°:	2 746 336 215 ly
z: 1.30 :	44":	786 228 ly;	44':	47 173 561 ly;	44°:	2 809 214 760 ly
z: 1.30 :	45":	804 096 ly;	45':	48 245 683 ly;	45°:	2 872 021 252 ly
z: 1.30 :	46":	821 965 ly;	46':	49 317 804 ly;	46°:	2 934 753 605 ly
z: 1.30 :	47":	839 834 ly;	47':	50 389 926 ly;	47°:	2 997 409 698 ly
z: 1.30 :	48":	857 703 ly;	48':	51 462 047 ly;	48°:	3 059 987 377 ly
z: 1.30 :	49":	875 572 ly;	49':	52 534 168 ly;	49°:	3 122 484 453 ly
z: 1.30 :	50":	893 440 ly;	50':	53 606 288 ly;	50°:	3 184 898 699 ly
z: 1.30 :	51":	911 309 ly;	51':	54 678 408 ly;	51°:	3 247 227 851 ly
z: 1.30 :	52":	929 178 ly;	52':	55 750 528 ly;	52°:	3 309 469 607 ly
z: 1.30 :	53":	947 047 ly;	53':	56 822 647 ly;	53°:	3 371 621 624 ly
z: 1.30 :	54":	964 916 ly;	54':	57 894 766 ly;	54°:	3 433 681 519 ly
z: 1.30 :	55":	982 784 ly;	55':	58 966 885 ly;	55°:	3 495 646 863 ly

z: 1.30 :	56":	1 000 653 ly;	56':	60 039 003 ly;	56°:	3 557 515 189 ly
z: 1.30 :	57":	1 018 522 ly;	57':	61 111 121 ly;	57°:	3 619 283 979 ly
z: 1.30 :	58":	1 036 391 ly;	58':	62 183 238 ly;	58°:	3 680 950 673 ly
z: 1.30 :	59":	1 054 260 ly;	59':	63 255 356 ly;	59°:	3 742 512 660 ly
z: 1.40 :	1":	17 028 ly;	1':	1 021 658 ly;	1°:	61 299 183 ly
z: 1.40 :	2":	34 055 ly;	2':	2 043 315 ly;	2°:	122 596 696 ly
z: 1.40 :	3":	51 083 ly;	3':	3 064 973 ly;	3°:	183 890 865 ly
z: 1.40 :	4":	68 110 ly;	4':	4 086 631 ly;	4°:	245 180 020 ly
z: 1.40 :	5":	85 138 ly;	5':	5 108 288 ly;	5°:	306 462 484 ly
z: 1.40 :	6":	102 166 ly;	6':	6 129 946 ly;	6°:	367 736 581 ly
z: 1.40 :	7":	119 193 ly;	7':	7 151 603 ly;	7°:	429 000 631 ly
z: 1.40 :	8":	136 221 ly;	8':	8 173 261 ly;	8°:	490 252 950 ly
z: 1.40 :	9":	153 249 ly;	9':	9 194 918 ly;	9°:	551 491 849 ly
z: 1.40 :	10":	170 276 ly;	10':	10 216 576 ly;	10°:	612 715 637 ly
z: 1.40 :	11":	187 304 ly;	11':	11 238 233 ly;	11°:	673 922 614 ly
z: 1.40 :	12":	204 332 ly;	12':	12 259 890 ly;	12°:	735 111 076 ly
z: 1.40 :	13":	221 359 ly;	13':	13 281 547 ly;	13°:	796 279 311 ly
z: 1.40 :	14":	238 387 ly;	14':	14 303 204 ly;	14°:	857 425 601 ly
z: 1.40 :	15":	255 414 ly;	15':	15 324 861 ly;	15°:	918 548 219 ly
z: 1.40 :	16":	272 442 ly;	16':	16 346 518 ly;	16°:	979 645 429 ly
z: 1.40 :	17":	289 470 ly;	17':	17 368 174 ly;	17°:	1 040 715 487 ly
z: 1.40 :	18":	306 497 ly;	18':	18 389 831 ly;	18°:	1 101 756 638 ly
z: 1.40 :	19":	323 525 ly;	19':	19 411 487 ly;	19°:	1 162 767 116 ly
z: 1.40 :	20":	340 553 ly;	20':	20 433 144 ly;	20°:	1 223 745 144 ly
z: 1.40 :	21":	357 580 ly;	21':	21 454 800 ly;	21°:	1 284 688 935 ly
z: 1.40 :	22":	374 608 ly;	22':	22 476 456 ly;	22°:	1 345 596 687 ly
z: 1.40 :	23":	391 635 ly;	23':	23 498 111 ly;	23°:	1 406 466 584 ly
z: 1.40 :	24":	408 663 ly;	24':	24 519 767 ly;	24°:	1 467 296 800 ly
z: 1.40 :	25":	425 691 ly;	25':	25 541 422 ly;	25°:	1 528 085 489 ly
z: 1.40 :	26":	442 718 ly;	26':	26 563 077 ly;	26°:	1 588 830 795 ly
z: 1.40 :	27":	459 746 ly;	27':	27 584 732 ly;	27°:	1 649 530 841 ly
z: 1.40 :	28":	476 774 ly;	28':	28 606 387 ly;	28°:	1 710 183 736 ly
z: 1.40 :	29":	493 801 ly;	29':	29 628 042 ly;	29°:	1 770 787 571 ly
z: 1.40 :	30":	510 829 ly;	30':	30 649 696 ly;	30°:	1 831 340 419 ly
z: 1.40 :	31":	527 856 ly;	31':	31 671 350 ly;	31°:	1 891 840 332 ly
z: 1.40 :	32":	544 884 ly;	32':	32 693 004 ly;	32°:	1 952 285 344 ly
z: 1.40 :	33":	561 912 ly;	33':	33 714 658 ly;	33°:	2 012 673 469 ly
z: 1.40 :	34":	578 939 ly;	34':	34 736 311 ly;	34°:	2 073 002 697 ly
z: 1.40 :	35":	595 967 ly;	35':	35 757 964 ly;	35°:	2 133 270 998 ly
z: 1.40 :	36":	612 995 ly;	36':	36 779 617 ly;	36°:	2 193 476 318 ly
z: 1.40 :	37":	630 022 ly;	37':	37 801 269 ly;	37°:	2 253 616 580 ly
z: 1.40 :	38":	647 050 ly;	38':	38 822 922 ly;	38°:	2 313 689 682 ly
z: 1.40 :	39":	664 078 ly;	39':	39 844 574 ly;	39°:	2 373 693 495 ly
z: 1.40 :	40":	681 105 ly;	40':	40 866 225 ly;	40°:	2 433 625 866 ly
z: 1.40 :	41":	698 133 ly;	41':	41 887 877 ly;	41°:	2 493 484 613 ly
z: 1.40 :	42":	715 160 ly;	42':	42 909 528 ly;	42°:	2 553 267 527 ly
z: 1.40 :	43":	732 188 ly;	43':	43 931 178 ly;	43°:	2 612 972 369 ly
z: 1.40 :	44":	749 216 ly;	44':	44 952 829 ly;	44°:	2 672 596 871 ly
z: 1.40 :	45":	766 243 ly;	45':	45 974 479 ly;	45°:	2 732 138 734 ly
z: 1.40 :	46":	783 271 ly;	46':	46 996 129 ly;	46°:	2 791 595 625 ly
z: 1.40 :	47":	800 299 ly;	47':	48 017 778 ly;	47°:	2 850 965 181 ly
z: 1.40 :	48":	817 326 ly;	48':	49 039 427 ly;	48°:	2 910 245 003 ly
z: 1.40 :	49":	834 354 ly;	49':	50 061 075 ly;	49°:	2 969 432 660 ly
z: 1.40 :	50":	851 381 ly;	50':	51 082 724 ly;	50°:	3 028 525 682 ly
z: 1.40 :	51":	868 409 ly;	51':	52 104 371 ly;	51°:	3 087 521 563 ly
z: 1.40 :	52":	885 437 ly;	52':	53 126 019 ly;	52°:	3 146 417 761 ly
z: 1.40 :	53":	902 464 ly;	53':	54 147 666 ly;	53°:	3 205 211 693 ly
z: 1.40 :	54":	919 492 ly;	54':	55 169 313 ly;	54°:	3 263 900 735 ly
z: 1.40 :	55":	936 520 ly;	55':	56 190 959 ly;	55°:	3 322 482 224 ly
z: 1.40 :	56":	953 547 ly;	56':	57 212 605 ly;	56°:	3 380 953 454 ly
z: 1.40 :	57":	970 575 ly;	57':	58 234 250 ly;	57°:	3 439 311 674 ly
z: 1.40 :	58":	987 602 ly;	58':	59 255 895 ly;	58°:	3 497 554 091 ly
z: 1.40 :	59":	1 004 630 ly;	59':	60 277 539 ly;	59°:	3 555 677 864 ly

z: 1.50 :	1" :	16 196 ly;	1' :	971 757 ly;	1° :	58 305 087 ly
z: 1.50 :	2" :	32 392 ly;	2' :	1 943 513 ly;	2° :	116 608 313 ly
z: 1.50 :	3" :	48 588 ly;	3' :	2 915 270 ly;	3° :	174 907 816 ly
z: 1.50 :	4" :	64 784 ly;	4' :	3 887 026 ly;	4° :	233 201 734 ly
z: 1.50 :	5" :	80 980 ly;	5' :	4 858 783 ly;	5° :	291 488 201 ly
z: 1.50 :	6" :	97 176 ly;	6' :	5 830 539 ly;	6° :	349 765 351 ly
z: 1.50 :	7" :	113 372 ly;	7' :	6 802 296 ly;	7° :	408 031 313 ly
z: 1.50 :	8" :	129 568 ly;	8' :	7 774 052 ly;	8° :	466 284 214 ly
z: 1.50 :	9" :	145 763 ly;	9' :	8 745 809 ly;	9° :	524 522 177 ly
z: 1.50 :	10" :	161 959 ly;	10' :	9 717 565 ly;	10° :	582 743 317 ly
z: 1.50 :	11" :	178 155 ly;	11' :	10 689 321 ly;	11° :	640 945 747 ly
z: 1.50 :	12" :	194 351 ly;	12' :	11 661 077 ly;	12° :	699 127 574 ly
z: 1.50 :	13" :	210 547 ly;	13' :	12 632 833 ly;	13° :	757 286 895 ly
z: 1.50 :	14" :	226 743 ly;	14' :	13 604 589 ly;	14° :	815 421 804 ly
z: 1.50 :	15" :	242 939 ly;	15' :	14 576 344 ly;	15° :	873 530 383 ly
z: 1.50 :	16" :	259 135 ly;	16' :	15 548 100 ly;	16° :	931 610 709 ly
z: 1.50 :	17" :	275 331 ly;	17' :	16 519 855 ly;	17° :	989 660 848 ly
z: 1.50 :	18" :	291 527 ly;	18' :	17 491 611 ly;	18° :	1 047 678 857 ly
z: 1.50 :	19" :	307 723 ly;	19' :	18 463 366 ly;	19° :	1 105 662 781 ly
z: 1.50 :	20" :	323 919 ly;	20' :	19 435 121 ly;	20° :	1 163 610 656 ly
z: 1.50 :	21" :	340 115 ly;	21' :	20 406 876 ly;	21° :	1 221 520 505 ly
z: 1.50 :	22" :	356 311 ly;	22' :	21 378 630 ly;	22° :	1 279 390 340 ly
z: 1.50 :	23" :	372 507 ly;	23' :	22 350 385 ly;	23° :	1 337 218 159 ly
z: 1.50 :	24" :	388 703 ly;	24' :	23 322 139 ly;	24° :	1 395 001 945 ly
z: 1.50 :	25" :	404 899 ly;	25' :	24 293 893 ly;	25° :	1 452 739 670 ly
z: 1.50 :	26" :	421 095 ly;	26' :	25 265 647 ly;	26° :	1 510 429 288 ly
z: 1.50 :	27" :	437 290 ly;	27' :	26 237 400 ly;	27° :	1 568 068 739 ly
z: 1.50 :	28" :	453 486 ly;	28' :	27 209 154 ly;	28° :	1 625 655 946 ly
z: 1.50 :	29" :	469 682 ly;	29' :	28 180 907 ly;	29° :	1 683 188 815 ly
z: 1.50 :	30" :	485 878 ly;	30' :	29 152 660 ly;	30° :	1 740 665 235 ly
z: 1.50 :	31" :	502 074 ly;	31' :	30 124 412 ly;	31° :	1 798 083 075 ly
z: 1.50 :	32" :	518 270 ly;	32' :	31 096 165 ly;	32° :	1 855 440 186 ly
z: 1.50 :	33" :	534 466 ly;	33' :	32 067 917 ly;	33° :	1 912 734 399 ly
z: 1.50 :	34" :	550 662 ly;	34' :	33 039 669 ly;	34° :	1 969 963 524 ly
z: 1.50 :	35" :	566 858 ly;	35' :	34 011 420 ly;	35° :	2 027 125 350 ly
z: 1.50 :	36" :	583 054 ly;	36' :	34 983 171 ly;	36° :	2 084 217 644 ly
z: 1.50 :	37" :	599 250 ly;	37' :	35 954 922 ly;	37° :	2 141 238 150 ly
z: 1.50 :	38" :	615 446 ly;	38' :	36 926 673 ly;	38° :	2 198 184 587 ly
z: 1.50 :	39" :	631 642 ly;	39' :	37 898 423 ly;	39° :	2 255 054 653 ly
z: 1.50 :	40" :	647 838 ly;	40' :	38 870 173 ly;	40° :	2 311 846 016 ly
z: 1.50 :	41" :	664 034 ly;	41' :	39 841 922 ly;	41° :	2 368 556 324 ly
z: 1.50 :	42" :	680 230 ly;	42' :	40 813 672 ly;	42° :	2 425 183 192 ly
z: 1.50 :	43" :	696 426 ly;	43' :	41 785 421 ly;	43° :	2 481 724 213 ly
z: 1.50 :	44" :	712 622 ly;	44' :	42 757 169 ly;	44° :	2 538 176 946 ly
z: 1.50 :	45" :	728 817 ly;	45' :	43 728 917 ly;	45° :	2 594 538 927 ly
z: 1.50 :	46" :	745 013 ly;	46' :	44 700 665 ly;	46° :	2 650 807 657 ly
z: 1.50 :	47" :	761 209 ly;	47' :	45 672 412 ly;	47° :	2 706 980 607 ly
z: 1.50 :	48" :	777 405 ly;	48' :	46 644 159 ly;	48° :	2 763 055 219 ly
z: 1.50 :	49" :	793 601 ly;	49' :	47 615 905 ly;	49° :	2 819 028 898 ly
z: 1.50 :	50" :	809 797 ly;	50' :	48 587 652 ly;	50° :	2 874 899 020 ly
z: 1.50 :	51" :	825 993 ly;	51' :	49 559 397 ly;	51° :	2 930 662 924 ly
z: 1.50 :	52" :	842 189 ly;	52' :	50 531 142 ly;	52° :	2 986 317 913 ly
z: 1.50 :	53" :	858 385 ly;	53' :	51 502 887 ly;	53° :	3 041 861 255 ly
z: 1.50 :	54" :	874 581 ly;	54' :	52 474 631 ly;	54° :	3 097 290 181 ly
z: 1.50 :	55" :	890 777 ly;	55' :	53 446 375 ly;	55° :	3 152 601 884 ly
z: 1.50 :	56" :	906 973 ly;	56' :	54 418 119 ly;	56° :	3 207 793 517 ly
z: 1.50 :	57" :	923 169 ly;	57' :	55 389 861 ly;	57° :	3 262 862 192 ly
z: 1.50 :	58" :	939 365 ly;	58' :	56 361 604 ly;	58° :	3 317 804 983 ly
z: 1.50 :	59" :	955 561 ly;	59' :	57 333 346 ly;	59° :	3 372 618 921 ly
z: 1.60 :	1" :	15 387 ly;	1' :	923 193 ly;	1° :	55 391 218 ly
z: 1.60 :	2" :	30 773 ly;	2' :	1 846 385 ly;	2° :	110 780 430 ly
z: 1.60 :	3" :	46 160 ly;	3' :	2 769 578 ly;	3° :	166 165 627 ly
z: 1.60 :	4" :	61 546 ly;	4' :	3 692 770 ly;	4° :	221 544 802 ly
z: 1.60 :	5" :	76 933 ly;	5' :	4 615 963 ly;	5° :	276 915 943 ly

z: 1.60 :	6" :	92 319 ly;	6' :	5 539 155 ly;	6° :	332 277 038 ly
z: 1.60 :	7" :	107 706 ly;	7' :	6 462 347 ly;	7° :	387 626 073 ly
z: 1.60 :	8" :	123 092 ly;	8' :	7 385 540 ly;	8° :	442 961 027 ly
z: 1.60 :	9" :	138 479 ly;	9' :	8 308 732 ly;	9° :	498 279 879 ly
z: 1.60 :	10" :	153 865 ly;	10' :	9 231 924 ly;	10° :	553 580 600 ly
z: 1.60 :	11" :	169 252 ly;	11' :	10 155 116 ly;	11° :	608 861 159 ly
z: 1.60 :	12" :	184 639 ly;	12' :	11 078 308 ly;	12° :	664 119 517 ly
z: 1.60 :	13" :	200 025 ly;	13' :	12 001 500 ly;	13° :	719 353 630 ly
z: 1.60 :	14" :	215 412 ly;	14' :	12 924 691 ly;	14° :	774 561 446 ly
z: 1.60 :	15" :	230 798 ly;	15' :	13 847 883 ly;	15° :	829 740 906 ly
z: 1.60 :	16" :	246 185 ly;	16' :	14 771 074 ly;	16° :	884 889 944 ly
z: 1.60 :	17" :	261 571 ly;	17' :	15 694 266 ly;	17° :	940 006 484 ly
z: 1.60 :	18" :	276 958 ly;	18' :	16 617 457 ly;	18° :	995 088 441 ly
z: 1.60 :	19" :	292 344 ly;	19' :	17 540 648 ly;	19° :	1 050 133 722 ly
z: 1.60 :	20" :	307 731 ly;	20' :	18 463 839 ly;	20° :	1 105 140 220 ly
z: 1.60 :	21" :	323 117 ly;	21' :	19 387 029 ly;	21° :	1 160 105 819 ly
z: 1.60 :	22" :	338 504 ly;	22' :	20 310 220 ly;	22° :	1 215 028 394 ly
z: 1.60 :	23" :	353 890 ly;	23' :	21 233 410 ly;	23° :	1 269 905 803 ly
z: 1.60 :	24" :	369 277 ly;	24' :	22 156 600 ly;	24° :	1 324 735 894 ly
z: 1.60 :	25" :	384 664 ly;	25' :	23 079 790 ly;	25° :	1 379 516 501 ly
z: 1.60 :	26" :	400 050 ly;	26' :	24 002 979 ly;	26° :	1 434 245 444 ly
z: 1.60 :	27" :	415 437 ly;	27' :	24 926 168 ly;	27° :	1 488 920 529 ly
z: 1.60 :	28" :	430 823 ly;	28' :	25 849 357 ly;	28° :	1 543 539 544 ly
z: 1.60 :	29" :	446 210 ly;	29' :	26 772 546 ly;	29° :	1 598 100 265 ly
z: 1.60 :	30" :	461 596 ly;	30' :	27 695 735 ly;	30° :	1 652 600 449 ly
z: 1.60 :	31" :	476 983 ly;	31' :	28 618 923 ly;	31° :	1 707 037 836 ly
z: 1.60 :	32" :	492 369 ly;	32' :	29 542 111 ly;	32° :	1 761 410 149 ly
z: 1.60 :	33" :	507 756 ly;	33' :	30 465 298 ly;	33° :	1 815 715 091 ly
z: 1.60 :	34" :	523 142 ly;	34' :	31 388 486 ly;	34° :	1 869 950 348 ly
z: 1.60 :	35" :	538 529 ly;	35' :	32 311 673 ly;	35° :	1 924 113 584 ly
z: 1.60 :	36" :	553 916 ly;	36' :	33 234 859 ly;	36° :	1 978 202 444 ly
z: 1.60 :	37" :	569 302 ly;	37' :	34 158 046 ly;	37° :	2 032 214 551 ly
z: 1.60 :	38" :	584 689 ly;	38' :	35 081 232 ly;	38° :	2 086 147 508 ly
z: 1.60 :	39" :	600 075 ly;	39' :	36 004 418 ly;	39° :	2 139 998 893 ly
z: 1.60 :	40" :	615 462 ly;	40' :	36 927 603 ly;	40° :	2 193 766 262 ly
z: 1.60 :	41" :	630 848 ly;	41' :	37 850 788 ly;	41° :	2 247 447 148 ly
z: 1.60 :	42" :	646 235 ly;	42' :	38 773 972 ly;	42° :	2 301 039 058 ly
z: 1.60 :	43" :	661 621 ly;	43' :	39 697 156 ly;	43° :	2 354 539 474 ly
z: 1.60 :	44" :	677 008 ly;	44' :	40 620 340 ly;	44° :	2 407 945 853 ly
z: 1.60 :	45" :	692 394 ly;	45' :	41 543 524 ly;	45° :	2 461 255 625 ly
z: 1.60 :	46" :	707 781 ly;	46' :	42 466 707 ly;	46° :	2 514 466 192 ly
z: 1.60 :	47" :	723 167 ly;	47' :	43 389 889 ly;	47° :	2 567 574 929 ly
z: 1.60 :	48" :	738 554 ly;	48' :	44 313 071 ly;	48° :	2 620 579 181 ly
z: 1.60 :	49" :	753 941 ly;	49' :	45 236 253 ly;	49° :	2 673 476 264 ly
z: 1.60 :	50" :	769 327 ly;	50' :	46 159 434 ly;	50° :	2 726 263 463 ly
z: 1.60 :	51" :	784 714 ly;	51' :	47 082 615 ly;	51° :	2 778 938 034 ly
z: 1.60 :	52" :	800 100 ly;	52' :	48 005 795 ly;	52° :	2 831 497 199 ly
z: 1.60 :	53" :	815 487 ly;	53' :	48 928 975 ly;	53° :	2 883 938 149 ly
z: 1.60 :	54" :	830 873 ly;	54' :	49 852 154 ly;	54° :	2 936 258 041 ly
z: 1.60 :	55" :	846 260 ly;	55' :	50 775 333 ly;	55° :	2 988 453 999 ly
z: 1.60 :	56" :	861 646 ly;	56' :	51 698 511 ly;	56° :	3 040 523 109 ly
z: 1.60 :	57" :	877 033 ly;	57' :	52 621 688 ly;	57° :	3 092 462 427 ly
z: 1.60 :	58" :	892 419 ly;	58' :	53 544 866 ly;	58° :	3 144 268 967 ly
z: 1.60 :	59" :	907 806 ly;	59' :	54 468 042 ly;	59° :	3 195 939 709 ly
z: 1.70 :	1" :	14 608 ly;	1' :	876 454 ly;	1° :	52 586 880 ly
z: 1.70 :	2" :	29 215 ly;	2' :	1 752 908 ly;	2° :	105 171 647 ly
z: 1.70 :	3" :	43 823 ly;	3' :	2 629 362 ly;	3° :	157 752 189 ly
z: 1.70 :	4" :	58 430 ly;	4' :	3 505 815 ly;	4° :	210 326 391 ly
z: 1.70 :	5" :	73 038 ly;	5' :	4 382 269 ly;	5° :	262 892 138 ly
z: 1.70 :	6" :	87 645 ly;	6' :	5 258 723 ly;	6° :	315 447 312 ly
z: 1.70 :	7" :	102 253 ly;	7' :	6 135 176 ly;	7° :	367 989 793 ly
z: 1.70 :	8" :	116 861 ly;	8' :	7 011 630 ly;	8° :	420 517 458 ly
z: 1.70 :	9" :	131 468 ly;	9' :	7 888 084 ly;	9° :	473 028 178 ly
z: 1.70 :	10" :	146 076 ly;	10' :	8 764 537 ly;	10° :	525 519 824 ly

z: 1.70 :	11":	160 683 ly;	11':	9 640 990 ly;	11°:	577 990 258 ly
z: 1.70 :	12":	175 291 ly;	12':	10 517 444 ly;	12°:	630 437 339 ly
z: 1.70 :	13":	189 898 ly;	13':	11 393 897 ly;	13°:	682 858 922 ly
z: 1.70 :	14":	204 506 ly;	14':	12 270 350 ly;	14°:	735 252 851 ly
z: 1.70 :	15":	219 113 ly;	15':	13 146 802 ly;	15°:	787 616 966 ly
z: 1.70 :	16":	233 721 ly;	16':	14 023 255 ly;	16°:	839 949 101 ly
z: 1.70 :	17":	248 329 ly;	17':	14 899 708 ly;	17°:	892 247 080 ly
z: 1.70 :	18":	262 936 ly;	18':	15 776 160 ly;	18°:	944 508 718 ly
z: 1.70 :	19":	277 544 ly;	19':	16 652 612 ly;	19°:	996 731 823 ly
z: 1.70 :	20":	292 151 ly;	20':	17 529 064 ly;	20°:	1 048 914 192 ly
z: 1.70 :	21":	306 759 ly;	21':	18 405 516 ly;	21°:	1 101 053 613 ly
z: 1.70 :	22":	321 366 ly;	22':	19 281 968 ly;	22°:	1 153 147 862 ly
z: 1.70 :	23":	335 974 ly;	23':	20 158 419 ly;	23°:	1 205 194 705 ly
z: 1.70 :	24":	350 582 ly;	24':	21 034 870 ly;	24°:	1 257 191 897 ly
z: 1.70 :	25":	365 189 ly;	25':	21 911 321 ly;	25°:	1 309 137 179 ly
z: 1.70 :	26":	379 797 ly;	26':	22 787 772 ly;	26°:	1 361 028 280 ly
z: 1.70 :	27":	394 404 ly;	27':	23 664 222 ly;	27°:	1 412 862 916 ly
z: 1.70 :	28":	409 012 ly;	28':	24 540 672 ly;	28°:	1 464 638 788 ly
z: 1.70 :	29":	423 619 ly;	29':	25 417 122 ly;	29°:	1 516 353 584 ly
z: 1.70 :	30":	438 227 ly;	30':	26 293 572 ly;	30°:	1 568 004 976 ly
z: 1.70 :	31":	452 834 ly;	31':	27 170 021 ly;	31°:	1 619 590 621 ly
z: 1.70 :	32":	467 442 ly;	32':	28 046 470 ly;	32°:	1 671 108 159 ly
z: 1.70 :	33":	482 050 ly;	33':	28 922 919 ly;	33°:	1 722 555 215 ly
z: 1.70 :	34":	496 657 ly;	34':	29 799 367 ly;	34°:	1 773 929 394 ly
z: 1.70 :	35":	511 265 ly;	35':	30 675 815 ly;	35°:	1 825 228 286 ly
z: 1.70 :	36":	525 872 ly;	36':	31 552 263 ly;	36°:	1 876 449 461 ly
z: 1.70 :	37":	540 480 ly;	37':	32 428 710 ly;	37°:	1 927 590 471 ly
z: 1.70 :	38":	555 087 ly;	38':	33 305 157 ly;	38°:	1 978 648 846 ly
z: 1.70 :	39":	569 695 ly;	39':	34 181 604 ly;	39°:	2 029 622 100 ly
z: 1.70 :	40":	584 303 ly;	40':	35 058 050 ly;	40°:	2 080 507 722 ly
z: 1.70 :	41":	598 910 ly;	41':	35 934 496 ly;	41°:	2 131 303 182 ly
z: 1.70 :	42":	613 518 ly;	42':	36 810 941 ly;	42°:	2 182 005 929 ly
z: 1.70 :	43":	628 125 ly;	43':	37 687 387 ly;	43°:	2 232 613 387 ly
z: 1.70 :	44":	642 733 ly;	44':	38 563 831 ly;	44°:	2 283 122 959 ly
z: 1.70 :	45":	657 340 ly;	45':	39 440 275 ly;	45°:	2 333 532 024 ly
z: 1.70 :	46":	671 948 ly;	46':	40 316 719 ly;	46°:	2 383 837 935 ly
z: 1.70 :	47":	686 556 ly;	47':	41 193 162 ly;	47°:	2 434 038 022 ly
z: 1.70 :	48":	701 163 ly;	48':	42 069 605 ly;	48°:	2 484 129 590 ly
z: 1.70 :	49":	715 771 ly;	49':	42 946 048 ly;	49°:	2 534 109 917 ly
z: 1.70 :	50":	730 378 ly;	50':	43 822 489 ly;	50°:	2 583 976 253 ly
z: 1.70 :	51":	744 986 ly;	51':	44 698 931 ly;	51°:	2 633 725 824 ly
z: 1.70 :	52":	759 593 ly;	52':	45 575 372 ly;	52°:	2 683 355 825 ly
z: 1.70 :	53":	774 201 ly;	53':	46 451 812 ly;	53°:	2 732 863 426 ly
z: 1.70 :	54":	788 808 ly;	54':	47 328 252 ly;	54°:	2 782 245 765 ly
z: 1.70 :	55":	803 416 ly;	55':	48 204 691 ly;	55°:	2 831 499 952 ly
z: 1.70 :	56":	818 024 ly;	56':	49 081 130 ly;	56°:	2 880 623 067 ly
z: 1.70 :	57":	832 631 ly;	57':	49 957 568 ly;	57°:	2 929 612 157 ly
z: 1.70 :	58":	847 239 ly;	58':	50 834 006 ly;	58°:	2 978 464 241 ly
z: 1.70 :	59":	861 846 ly;	59':	51 710 443 ly;	59°:	3 027 176 304 ly

z: 1.80 :	1":	13 864 ly;	1':	831 830 ly;	1°:	49 909 435 ly
z: 1.80 :	2":	27 728 ly;	2':	1 663 660 ly;	2°:	99 816 687 ly
z: 1.80 :	3":	41 592 ly;	3':	2 495 490 ly;	3°:	149 719 573 ly
z: 1.80 :	4":	55 455 ly;	4':	3 327 320 ly;	4°:	199 615 906 ly
z: 1.80 :	5":	69 319 ly;	5':	4 159 150 ly;	5°:	249 503 503 ly
z: 1.80 :	6":	83 183 ly;	6':	4 990 980 ly;	6°:	299 380 175 ly
z: 1.80 :	7":	97 047 ly;	7':	5 822 809 ly;	7°:	349 243 731 ly
z: 1.80 :	8":	110 911 ly;	8':	6 654 639 ly;	8°:	399 091 978 ly
z: 1.80 :	9":	124 775 ly;	9':	7 486 469 ly;	9°:	448 922 721 ly
z: 1.80 :	10":	138 638 ly;	10':	8 318 298 ly;	10°:	498 733 760 ly
z: 1.80 :	11":	152 502 ly;	11':	9 150 128 ly;	11°:	548 522 888 ly
z: 1.80 :	12":	166 366 ly;	12':	9 981 957 ly;	12°:	598 287 899 ly
z: 1.80 :	13":	180 230 ly;	13':	10 813 786 ly;	13°:	648 026 577 ly
z: 1.80 :	14":	194 094 ly;	14':	11 645 615 ly;	14°:	697 736 703 ly
z: 1.80 :	15":	207 958 ly;	15':	12 477 444 ly;	15°:	747 416 051 ly

z: 1.80 :	16" :	221 821 ly;	16' :	13 309 273 ly;	16° :	797 062 387 ly
z: 1.80 :	17" :	235 685 ly;	17' :	14 141 101 ly;	17° :	846 673 473 ly
z: 1.80 :	18" :	249 549 ly;	18' :	14 972 930 ly;	18° :	896 247 060 ly
z: 1.80 :	19" :	263 413 ly;	19' :	15 804 758 ly;	19° :	945 780 894 ly
z: 1.80 :	20" :	277 277 ly;	20' :	16 636 586 ly;	20° :	995 272 711 ly
z: 1.80 :	21" :	291 140 ly;	21' :	17 468 414 ly;	21° :	1 044 720 238 ly
z: 1.80 :	22" :	305 004 ly;	22' :	18 300 242 ly;	22° :	1 094 121 193 ly
z: 1.80 :	23" :	318 868 ly;	23' :	19 132 069 ly;	23° :	1 143 473 283 ly
z: 1.80 :	24" :	332 732 ly;	24' :	19 963 896 ly;	24° :	1 192 774 206 ly
z: 1.80 :	25" :	346 596 ly;	25' :	20 795 723 ly;	25° :	1 242 021 648 ly
z: 1.80 :	26" :	360 460 ly;	26' :	21 627 550 ly;	26° :	1 291 213 285 ly
z: 1.80 :	27" :	374 323 ly;	27' :	22 459 376 ly;	27° :	1 340 346 779 ly
z: 1.80 :	28" :	388 187 ly;	28' :	23 291 203 ly;	28° :	1 389 419 781 ly
z: 1.80 :	29" :	402 051 ly;	29' :	24 123 028 ly;	29° :	1 438 429 931 ly
z: 1.80 :	30" :	415 915 ly;	30' :	24 954 854 ly;	30° :	1 487 374 851 ly
z: 1.80 :	31" :	429 779 ly;	31' :	25 786 679 ly;	31° :	1 536 252 154 ly
z: 1.80 :	32" :	443 643 ly;	32' :	26 618 504 ly;	32° :	1 585 059 435 ly
z: 1.80 :	33" :	457 506 ly;	33' :	27 450 329 ly;	33° :	1 633 794 277 ly
z: 1.80 :	34" :	471 370 ly;	34' :	28 282 153 ly;	34° :	1 682 454 247 ly
z: 1.80 :	35" :	485 234 ly;	35' :	29 113 977 ly;	35° :	1 731 036 896 ly
z: 1.80 :	36" :	499 098 ly;	36' :	29 945 801 ly;	36° :	1 779 539 757 ly
z: 1.80 :	37" :	512 962 ly;	37' :	30 777 624 ly;	37° :	1 827 960 350 ly
z: 1.80 :	38" :	526 826 ly;	38' :	31 609 447 ly;	38° :	1 876 296 176 ly
z: 1.80 :	39" :	540 689 ly;	39' :	32 441 269 ly;	39° :	1 924 544 717 ly
z: 1.80 :	40" :	554 553 ly;	40' :	33 273 092 ly;	40° :	1 972 703 439 ly
z: 1.80 :	41" :	568 417 ly;	41' :	34 104 913 ly;	41° :	2 020 769 788 ly
z: 1.80 :	42" :	582 281 ly;	42' :	34 936 735 ly;	42° :	2 068 741 193 ly
z: 1.80 :	43" :	596 145 ly;	43' :	35 768 555 ly;	43° :	2 116 615 060 ly
z: 1.80 :	44" :	610 009 ly;	44' :	36 600 376 ly;	44° :	2 164 388 777 ly
z: 1.80 :	45" :	623 872 ly;	45' :	37 432 196 ly;	45° :	2 212 059 713 ly
z: 1.80 :	46" :	637 736 ly;	46' :	38 264 015 ly;	46° :	2 259 625 213 ly
z: 1.80 :	47" :	651 600 ly;	47' :	39 095 834 ly;	47° :	2 307 082 601 ly
z: 1.80 :	48" :	665 464 ly;	48' :	39 927 653 ly;	48° :	2 354 429 182 ly
z: 1.80 :	49" :	679 328 ly;	49' :	40 759 471 ly;	49° :	2 401 662 236 ly
z: 1.80 :	50" :	693 192 ly;	50' :	41 591 289 ly;	50° :	2 448 779 020 ly
z: 1.80 :	51" :	707 055 ly;	51' :	42 423 106 ly;	51° :	2 495 776 768 ly
z: 1.80 :	52" :	720 919 ly;	52' :	43 254 922 ly;	52° :	2 542 652 692 ly
z: 1.80 :	53" :	734 783 ly;	53' :	44 086 738 ly;	53° :	2 589 403 976 ly
z: 1.80 :	54" :	748 647 ly;	54' :	44 918 554 ly;	54° :	2 636 027 783 ly
z: 1.80 :	55" :	762 511 ly;	55' :	45 750 369 ly;	55° :	2 682 521 250 ly
z: 1.80 :	56" :	776 375 ly;	56' :	46 582 183 ly;	56° :	2 728 881 486 ly
z: 1.80 :	57" :	790 238 ly;	57' :	47 413 997 ly;	57° :	2 775 105 577 ly
z: 1.80 :	58" :	804 102 ly;	58' :	48 245 810 ly;	58° :	2 821 190 581 ly
z: 1.80 :	59" :	817 966 ly;	59' :	49 077 623 ly;	59° :	2 867 133 529 ly
z: 1.90 :	1" :	13 158 ly;	1' :	789 470 ly;	1° :	47 367 837 ly
z: 1.90 :	2" :	26 316 ly;	2' :	1 578 940 ly;	2° :	94 733 450 ly
z: 1.90 :	3" :	39 474 ly;	3' :	2 368 410 ly;	3° :	142 094 614 ly
z: 1.90 :	4" :	52 631 ly;	4' :	3 157 880 ly;	4° :	189 449 104 ly
z: 1.90 :	5" :	65 789 ly;	5' :	3 947 350 ly;	5° :	236 794 691 ly
z: 1.90 :	6" :	78 947 ly;	6' :	4 736 820 ly;	6° :	284 129 149 ly
z: 1.90 :	7" :	92 105 ly;	7' :	5 526 290 ly;	7° :	331 450 245 ly
z: 1.90 :	8" :	105 263 ly;	8' :	6 315 760 ly;	8° :	378 755 748 ly
z: 1.90 :	9" :	118 421 ly;	9' :	7 105 230 ly;	9° :	426 043 421 ly
z: 1.90 :	10" :	131 578 ly;	10' :	7 894 700 ly;	10° :	473 311 025 ly
z: 1.90 :	11" :	144 736 ly;	11' :	8 684 169 ly;	11° :	520 556 317 ly
z: 1.90 :	12" :	157 894 ly;	12' :	9 473 639 ly;	12° :	567 777 050 ly
z: 1.90 :	13" :	171 052 ly;	13' :	10 263 108 ly;	13° :	614 970 971 ly
z: 1.90 :	14" :	184 210 ly;	14' :	11 052 577 ly;	14° :	662 135 825 ly
z: 1.90 :	15" :	197 368 ly;	15' :	11 842 046 ly;	15° :	709 269 348 ly
z: 1.90 :	16" :	210 525 ly;	16' :	12 631 515 ly;	16° :	756 369 274 ly
z: 1.90 :	17" :	223 683 ly;	17' :	13 420 984 ly;	17° :	803 433 328 ly
z: 1.90 :	18" :	236 841 ly;	18' :	14 210 452 ly;	18° :	850 459 229 ly
z: 1.90 :	19" :	249 999 ly;	19' :	14 999 921 ly;	19° :	897 444 689 ly
z: 1.90 :	20" :	263 157 ly;	20' :	15 789 389 ly;	20° :	944 387 413 ly

z: 1.90 :	21":	276 315 ly;	21':	16 578 857 ly;	21°:	991 285 098 ly
z: 1.90 :	22":	289 472 ly;	22':	17 368 325 ly;	22°:	1 038 135 432 ly
z: 1.90 :	23":	302 630 ly;	23':	18 157 792 ly;	23°:	1 084 936 096 ly
z: 1.90 :	24":	315 788 ly;	24':	18 947 260 ly;	24°:	1 131 684 759 ly
z: 1.90 :	25":	328 946 ly;	25':	19 736 727 ly;	25°:	1 178 379 084 ly
z: 1.90 :	26":	342 104 ly;	26':	20 526 193 ly;	26°:	1 225 016 720 ly
z: 1.90 :	27":	355 262 ly;	27':	21 315 660 ly;	27°:	1 271 595 310 ly
z: 1.90 :	28":	368 419 ly;	28':	22 105 126 ly;	28°:	1 318 112 484 ly
z: 1.90 :	29":	381 577 ly;	29':	22 894 592 ly;	29°:	1 364 565 860 ly
z: 1.90 :	30":	394 735 ly;	30':	23 684 058 ly;	30°:	1 410 953 045 ly
z: 1.90 :	31":	407 893 ly;	31':	24 473 523 ly;	31°:	1 457 271 636 ly
z: 1.90 :	32":	421 051 ly;	32':	25 262 988 ly;	32°:	1 503 519 215 ly
z: 1.90 :	33":	434 209 ly;	33':	26 052 453 ly;	33°:	1 549 693 353 ly
z: 1.90 :	34":	447 366 ly;	34':	26 841 917 ly;	34°:	1 595 791 607 ly
z: 1.90 :	35":	460 524 ly;	35':	27 631 381 ly;	35°:	1 641 811 519 ly
z: 1.90 :	36":	473 682 ly;	36':	28 420 845 ly;	36°:	1 687 750 621 ly
z: 1.90 :	37":	486 840 ly;	37':	29 210 308 ly;	37°:	1 733 606 426 ly
z: 1.90 :	38":	499 998 ly;	38':	29 999 771 ly;	38°:	1 779 376 436 ly
z: 1.90 :	39":	513 156 ly;	39':	30 789 233 ly;	39°:	1 825 058 135 ly
z: 1.90 :	40":	526 313 ly;	40':	31 578 696 ly;	40°:	1 870 648 992 ly
z: 1.90 :	41":	539 471 ly;	41':	32 368 157 ly;	41°:	1 916 146 462 ly
z: 1.90 :	42":	552 629 ly;	42':	33 157 619 ly;	42°:	1 961 547 982 ly
z: 1.90 :	43":	565 787 ly;	43':	33 947 079 ly;	43°:	2 006 850 973 ly
z: 1.90 :	44":	578 945 ly;	44':	34 736 540 ly;	44°:	2 052 052 837 ly
z: 1.90 :	45":	592 103 ly;	45':	35 526 000 ly;	45°:	2 097 150 961 ly
z: 1.90 :	46":	605 260 ly;	46':	36 315 459 ly;	46°:	2 142 142 713 ly
z: 1.90 :	47":	618 418 ly;	47':	37 104 918 ly;	47°:	2 187 025 442 ly
z: 1.90 :	48":	631 576 ly;	48':	37 894 377 ly;	48°:	2 231 796 480 ly
z: 1.90 :	49":	644 734 ly;	49':	38 683 835 ly;	49°:	2 276 453 139 ly
z: 1.90 :	50":	657 892 ly;	50':	39 473 292 ly;	50°:	2 320 992 713 ly
z: 1.90 :	51":	671 050 ly;	51':	40 262 749 ly;	51°:	2 365 412 474 ly
z: 1.90 :	52":	684 207 ly;	52':	41 052 206 ly;	52°:	2 409 709 675 ly
z: 1.90 :	53":	697 365 ly;	53':	41 841 662 ly;	53°:	2 453 881 549 ly
z: 1.90 :	54":	710 523 ly;	54':	42 631 117 ly;	54°:	2 497 925 310 ly
z: 1.90 :	55":	723 681 ly;	55':	43 420 572 ly;	55°:	2 541 838 147 ly
z: 1.90 :	56":	736 839 ly;	56':	44 210 026 ly;	56°:	2 585 617 230 ly
z: 1.90 :	57":	749 997 ly;	57':	44 999 480 ly;	57°:	2 629 259 708 ly
z: 1.90 :	58":	763 154 ly;	58':	45 788 933 ly;	58°:	2 672 762 707 ly
z: 1.90 :	59":	776 312 ly;	59':	46 578 386 ly;	59°:	2 716 123 330 ly
z: 2.00 :	1":	12 490 ly;	1':	749 426 ly;	1°:	44 965 198 ly
z: 2.00 :	2":	24 981 ly;	2':	1 498 852 ly;	2°:	89 928 155 ly
z: 2.00 :	3":	37 471 ly;	3':	2 248 279 ly;	3°:	134 886 629 ly
z: 2.00 :	4":	49 962 ly;	4':	2 997 705 ly;	4°:	179 838 377 ly
z: 2.00 :	5":	62 452 ly;	5':	3 747 131 ly;	5°:	224 781 157 ly
z: 2.00 :	6":	74 943 ly;	6':	4 496 557 ly;	6°:	269 712 723 ly
z: 2.00 :	7":	87 433 ly;	7':	5 245 983 ly;	7°:	314 630 827 ly
z: 2.00 :	8":	99 923 ly;	8':	5 995 409 ly;	8°:	359 533 223 ly
z: 2.00 :	9":	112 414 ly;	9':	6 744 835 ly;	9°:	404 417 657 ly
z: 2.00 :	10":	124 904 ly;	10':	7 494 260 ly;	10°:	449 281 877 ly
z: 2.00 :	11":	137 395 ly;	11':	8 243 686 ly;	11°:	494 123 623 ly
z: 2.00 :	12":	149 885 ly;	12':	8 993 111 ly;	12°:	538 940 636 ly
z: 2.00 :	13":	162 376 ly;	13':	9 742 537 ly;	13°:	583 730 649 ly
z: 2.00 :	14":	174 866 ly;	14':	10 491 962 ly;	14°:	628 491 394 ly
z: 2.00 :	15":	187 357 ly;	15':	11 241 387 ly;	15°:	673 220 597 ly
z: 2.00 :	16":	199 847 ly;	16':	11 990 812 ly;	16°:	717 915 979 ly
z: 2.00 :	17":	212 337 ly;	17':	12 740 237 ly;	17°:	762 575 254 ly
z: 2.00 :	18":	224 828 ly;	18':	13 489 661 ly;	18°:	807 196 134 ly
z: 2.00 :	19":	237 318 ly;	19':	14 239 086 ly;	19°:	851 776 321 ly
z: 2.00 :	20":	249 809 ly;	20':	14 988 510 ly;	20°:	896 313 514 ly
z: 2.00 :	21":	262 299 ly;	21':	15 737 934 ly;	21°:	940 805 401 ly
z: 2.00 :	22":	274 790 ly;	22':	16 487 358 ly;	22°:	985 249 668 ly
z: 2.00 :	23":	287 280 ly;	23':	17 236 781 ly;	23°:	1 029 643 990 ly
z: 2.00 :	24":	299 770 ly;	24':	17 986 205 ly;	24°:	1 073 986 034 ly
z: 2.00 :	25":	312 261 ly;	25':	18 735 628 ly;	25°:	1 118 273 462 ly

z: 2.00 :	26" :	324 751 ly;	26' :	19 485 051 ly;	26° :	1 162 503 923 ly
z: 2.00 :	27" :	337 242 ly;	27' :	20 234 473 ly;	27° :	1 206 675 061 ly
z: 2.00 :	28" :	349 732 ly;	28' :	20 983 896 ly;	28° :	1 250 784 509 ly
z: 2.00 :	29" :	362 223 ly;	29' :	21 733 318 ly;	29° :	1 294 829 890 ly
z: 2.00 :	30" :	374 713 ly;	30' :	22 482 739 ly;	30° :	1 338 808 818 ly
z: 2.00 :	31" :	387 204 ly;	31' :	23 232 161 ly;	31° :	1 382 718 898 ly
z: 2.00 :	32" :	399 694 ly;	32' :	23 981 582 ly;	32° :	1 426 557 721 ly
z: 2.00 :	33" :	412 184 ly;	33' :	24 731 002 ly;	33° :	1 470 322 870 ly
z: 2.00 :	34" :	424 675 ly;	34' :	25 480 423 ly;	34° :	1 514 011 916 ly
z: 2.00 :	35" :	437 165 ly;	35' :	26 229 843 ly;	35° :	1 557 622 418 ly
z: 2.00 :	36" :	449 656 ly;	36' :	26 979 262 ly;	36° :	1 601 151 924 ly
z: 2.00 :	37" :	462 146 ly;	37' :	27 728 682 ly;	37° :	1 644 597 968 ly
z: 2.00 :	38" :	474 637 ly;	38' :	28 478 101 ly;	38° :	1 687 958 074 ly
z: 2.00 :	39" :	487 127 ly;	39' :	29 227 519 ly;	39° :	1 731 229 751 ly
z: 2.00 :	40" :	499 617 ly;	40' :	29 976 937 ly;	40° :	1 774 410 496 ly
z: 2.00 :	41" :	512 108 ly;	41' :	30 726 355 ly;	41° :	1 817 497 792 ly
z: 2.00 :	42" :	524 598 ly;	42' :	31 475 772 ly;	42° :	1 860 489 108 ly
z: 2.00 :	43" :	537 089 ly;	43' :	32 225 189 ly;	43° :	1 903 381 900 ly
z: 2.00 :	44" :	549 579 ly;	44' :	32 974 605 ly;	44° :	1 946 173 608 ly
z: 2.00 :	45" :	562 070 ly;	45' :	33 724 021 ly;	45° :	1 988 861 660 ly
z: 2.00 :	46" :	574 560 ly;	46' :	34 473 437 ly;	46° :	2 031 443 466 ly
z: 2.00 :	47" :	587 051 ly;	47' :	35 222 852 ly;	47° :	2 073 916 423 ly
z: 2.00 :	48" :	599 541 ly;	48' :	35 972 266 ly;	48° :	2 116 277 911 ly
z: 2.00 :	49" :	612 031 ly;	49' :	36 721 680 ly;	49° :	2 158 525 294 ly
z: 2.00 :	50" :	624 522 ly;	50' :	37 471 094 ly;	50° :	2 200 655 922 ly
z: 2.00 :	51" :	637 012 ly;	51' :	38 220 507 ly;	51° :	2 242 667 127 ly
z: 2.00 :	52" :	649 503 ly;	52' :	38 969 919 ly;	52° :	2 284 556 224 ly
z: 2.00 :	53" :	661 993 ly;	53' :	39 719 331 ly;	53° :	2 326 320 514 ly
z: 2.00 :	54" :	674 484 ly;	54' :	40 468 742 ly;	54° :	2 367 957 277 ly
z: 2.00 :	55" :	686 974 ly;	55' :	41 218 153 ly;	55° :	2 409 463 778 ly
z: 2.00 :	56" :	699 464 ly;	56' :	41 967 563 ly;	56° :	2 450 837 264 ly
z: 2.00 :	57" :	711 955 ly;	57' :	42 716 973 ly;	57° :	2 492 074 965 ly
z: 2.00 :	58" :	724 445 ly;	58' :	43 466 382 ly;	58° :	2 533 174 093 ly
z: 2.00 :	59" :	736 936 ly;	59' :	44 215 790 ly;	59° :	2 574 131 839 ly
z: 3.00 :	1" :	7 677 ly;	1' :	460 583 ly;	1° :	27 634 682 ly
z: 3.00 :	2" :	15 353 ly;	2' :	921 166 ly;	2° :	55 267 535 ly
z: 3.00 :	3" :	23 029 ly;	3' :	1 381 749 ly;	3° :	82 896 728 ly
z: 3.00 :	4" :	30 706 ly;	4' :	1 842 332 ly;	4° :	110 520 431 ly
z: 3.00 :	5" :	38 382 ly;	5' :	2 302 915 ly;	5° :	138 136 814 ly
z: 3.00 :	6" :	46 058 ly;	6' :	2 763 498 ly;	6° :	165 744 047 ly
z: 3.00 :	7" :	53 735 ly;	7' :	3 224 081 ly;	7° :	193 340 300 ly
z: 3.00 :	8" :	61 411 ly;	8' :	3 684 664 ly;	8° :	220 923 742 ly
z: 3.00 :	9" :	69 087 ly;	9' :	4 145 247 ly;	9° :	248 492 543 ly
z: 3.00 :	10" :	76 764 ly;	10' :	4 605 830 ly;	10° :	276 044 872 ly
z: 3.00 :	11" :	84 440 ly;	11' :	5 066 412 ly;	11° :	303 578 898 ly
z: 3.00 :	12" :	92 117 ly;	12' :	5 526 995 ly;	12° :	331 092 790 ly
z: 3.00 :	13" :	99 793 ly;	13' :	5 987 578 ly;	13° :	358 584 717 ly
z: 3.00 :	14" :	107 469 ly;	14' :	6 448 160 ly;	14° :	386 052 846 ly
z: 3.00 :	15" :	115 146 ly;	15' :	6 908 742 ly;	15° :	413 495 345 ly
z: 3.00 :	16" :	122 822 ly;	16' :	7 369 324 ly;	16° :	440 910 384 ly
z: 3.00 :	17" :	130 499 ly;	17' :	7 829 906 ly;	17° :	468 296 127 ly
z: 3.00 :	18" :	138 175 ly;	18' :	8 290 488 ly;	18° :	495 650 744 ly
z: 3.00 :	19" :	145 851 ly;	19' :	8 751 070 ly;	19° :	522 972 400 ly
z: 3.00 :	20" :	153 528 ly;	20' :	9 211 651 ly;	20° :	550 259 262 ly
z: 3.00 :	21" :	161 204 ly;	21' :	9 672 233 ly;	21° :	577 509 495 ly
z: 3.00 :	22" :	168 880 ly;	22' :	10 132 814 ly;	22° :	604 721 265 ly
z: 3.00 :	23" :	176 557 ly;	23' :	10 593 395 ly;	23° :	631 892 738 ly
z: 3.00 :	24" :	184 233 ly;	24' :	11 053 975 ly;	24° :	659 022 078 ly
z: 3.00 :	25" :	191 910 ly;	25' :	11 514 556 ly;	25° :	686 107 449 ly
z: 3.00 :	26" :	199 586 ly;	26' :	11 975 136 ly;	26° :	713 147 016 ly
z: 3.00 :	27" :	207 262 ly;	27' :	12 435 717 ly;	27° :	740 138 941 ly
z: 3.00 :	28" :	214 939 ly;	28' :	12 896 296 ly;	28° :	767 081 388 ly
z: 3.00 :	29" :	222 615 ly;	29' :	13 356 876 ly;	29° :	793 972 520 ly
z: 3.00 :	30" :	230 292 ly;	30' :	13 817 456 ly;	30° :	820 810 498 ly

z: 3.00 :	31":	237 968 ly;	31':	14 278 035 ly;	31°:	847 593 485 ly
z: 3.00 :	32":	245 644 ly;	32':	14 738 614 ly;	32°:	874 319 642 ly
z: 3.00 :	33":	253 321 ly;	33':	15 199 192 ly;	33°:	900 987 131 ly
z: 3.00 :	34":	260 997 ly;	34':	15 659 771 ly;	34°:	927 594 111 ly
z: 3.00 :	35":	268 673 ly;	35':	16 120 349 ly;	35°:	954 138 743 ly
z: 3.00 :	36":	276 350 ly;	36':	16 580 927 ly;	36°:	980 619 187 ly
z: 3.00 :	37":	284 026 ly;	37':	17 041 504 ly;	37°:	1 007 033 603 ly
z: 3.00 :	38":	291 703 ly;	38':	17 502 081 ly;	38°:	1 033 380 151 ly
z: 3.00 :	39":	299 379 ly;	39':	17 962 658 ly;	39°:	1 059 656 988 ly
z: 3.00 :	40":	307 055 ly;	40':	18 423 235 ly;	40°:	1 085 862 274 ly
z: 3.00 :	41":	314 732 ly;	41':	18 883 811 ly;	41°:	1 111 994 168 ly
z: 3.00 :	42":	322 408 ly;	42':	19 344 387 ly;	42°:	1 138 050 828 ly
z: 3.00 :	43":	330 085 ly;	43':	19 804 962 ly;	43°:	1 164 030 412 ly
z: 3.00 :	44":	337 761 ly;	44':	20 265 537 ly;	44°:	1 189 931 079 ly
z: 3.00 :	45":	345 437 ly;	45':	20 726 112 ly;	45°:	1 215 750 986 ly
z: 3.00 :	46":	353 114 ly;	46':	21 186 686 ly;	46°:	1 241 488 291 ly
z: 3.00 :	47":	360 790 ly;	47':	21 647 260 ly;	47°:	1 267 141 153 ly
z: 3.00 :	48":	368 466 ly;	48':	22 107 834 ly;	48°:	1 292 707 730 ly
z: 3.00 :	49":	376 143 ly;	49':	22 568 407 ly;	49°:	1 318 186 179 ly
z: 3.00 :	50":	383 819 ly;	50':	23 028 980 ly;	50°:	1 343 574 660 ly
z: 3.00 :	51":	391 496 ly;	51':	23 489 552 ly;	51°:	1 368 871 331 ly
z: 3.00 :	52":	399 172 ly;	52':	23 950 124 ly;	52°:	1 394 074 351 ly
z: 3.00 :	53":	406 848 ly;	53':	24 410 695 ly;	53°:	1 419 181 880 ly
z: 3.00 :	54":	414 525 ly;	54':	24 871 266 ly;	54°:	1 444 192 076 ly
z: 3.00 :	55":	422 201 ly;	55':	25 331 837 ly;	55°:	1 469 103 102 ly
z: 3.00 :	56":	429 878 ly;	56':	25 792 407 ly;	56°:	1 493 913 117 ly
z: 3.00 :	57":	437 554 ly;	57':	26 252 977 ly;	57°:	1 518 620 283 ly
z: 3.00 :	58":	445 230 ly;	58':	26 713 546 ly;	58°:	1 543 222 764 ly
z: 3.00 :	59":	452 907 ly;	59':	27 174 114 ly;	59°:	1 567 718 721 ly

z: 4.00 :	1":	5 086 ly;	1':	305 127 ly;	1°:	18 307 429 ly
z: 4.00 :	2":	10 171 ly;	2':	610 255 ly;	2°:	36 613 544 ly
z: 4.00 :	3":	15 256 ly;	3':	915 382 ly;	3°:	54 917 030 ly
z: 4.00 :	4":	20 342 ly;	4':	1 220 510 ly;	4°:	73 216 574 ly
z: 4.00 :	5":	25 427 ly;	5':	1 525 637 ly;	5°:	91 510 860 ly
z: 4.00 :	6":	30 513 ly;	6':	1 830 765 ly;	6°:	109 798 576 ly
z: 4.00 :	7":	35 598 ly;	7':	2 135 892 ly;	7°:	128 078 408 ly
z: 4.00 :	8":	40 684 ly;	8':	2 441 019 ly;	8°:	146 349 041 ly
z: 4.00 :	9":	45 769 ly;	9':	2 746 147 ly;	9°:	164 609 164 ly
z: 4.00 :	10":	50 855 ly;	10':	3 051 274 ly;	10°:	182 857 464 ly
z: 4.00 :	11":	55 940 ly;	11':	3 356 401 ly;	11°:	201 092 628 ly
z: 4.00 :	12":	61 025 ly;	12':	3 661 528 ly;	12°:	219 313 345 ly
z: 4.00 :	13":	66 111 ly;	13':	3 966 655 ly;	13°:	237 518 304 ly
z: 4.00 :	14":	71 196 ly;	14':	4 271 782 ly;	14°:	255 706 195 ly
z: 4.00 :	15":	76 282 ly;	15':	4 576 909 ly;	15°:	273 875 706 ly
z: 4.00 :	16":	81 367 ly;	16':	4 882 035 ly;	16°:	292 025 530 ly
z: 4.00 :	17":	86 453 ly;	17':	5 187 162 ly;	17°:	310 154 357 ly
z: 4.00 :	18":	91 538 ly;	18':	5 492 289 ly;	18°:	328 260 880 ly
z: 4.00 :	19":	96 624 ly;	19':	5 797 415 ly;	19°:	346 343 793 ly
z: 4.00 :	20":	101 709 ly;	20':	6 102 541 ly;	20°:	364 401 789 ly
z: 4.00 :	21":	106 795 ly;	21':	6 407 668 ly;	21°:	382 433 563 ly
z: 4.00 :	22":	111 880 ly;	22':	6 712 794 ly;	22°:	400 437 811 ly
z: 4.00 :	23":	116 966 ly;	23':	7 017 920 ly;	23°:	418 413 231 ly
z: 4.00 :	24":	122 051 ly;	24':	7 323 045 ly;	24°:	436 358 520 ly
z: 4.00 :	25":	127 136 ly;	25':	7 628 171 ly;	25°:	454 272 379 ly
z: 4.00 :	26":	132 222 ly;	26':	7 933 296 ly;	26°:	472 153 507 ly
z: 4.00 :	27":	137 307 ly;	27':	8 238 422 ly;	27°:	490 000 606 ly
z: 4.00 :	28":	142 393 ly;	28':	8 543 547 ly;	28°:	507 812 380 ly
z: 4.00 :	29":	147 478 ly;	29':	8 848 672 ly;	29°:	525 587 533 ly
z: 4.00 :	30":	152 564 ly;	30':	9 153 797 ly;	30°:	543 324 772 ly
z: 4.00 :	31":	157 649 ly;	31':	9 458 921 ly;	31°:	561 022 803 ly
z: 4.00 :	32":	162 735 ly;	32':	9 764 046 ly;	32°:	578 680 336 ly
z: 4.00 :	33":	167 820 ly;	33':	10 069 170 ly;	33°:	596 296 082 ly
z: 4.00 :	34":	172 906 ly;	34':	10 374 294 ly;	34°:	613 868 754 ly
z: 4.00 :	35":	177 991 ly;	35':	10 679 418 ly;	35°:	631 397 065 ly

z: 4.00 :	36" :	183 076 ly;	36' :	10 984 542 ly;	36° :	648 879 731 ly
z: 4.00 :	37" :	188 162 ly;	37' :	11 289 665 ly;	37° :	666 315 470 ly
z: 4.00 :	38" :	193 247 ly;	38' :	11 594 788 ly;	38° :	683 703 003 ly
z: 4.00 :	39" :	198 333 ly;	39' :	11 899 911 ly;	39° :	701 041 051 ly
z: 4.00 :	40" :	203 418 ly;	40' :	12 205 034 ly;	40° :	718 328 337 ly
z: 4.00 :	41" :	208 504 ly;	41' :	12 510 156 ly;	41° :	735 563 589 ly
z: 4.00 :	42" :	213 589 ly;	42' :	12 815 279 ly;	42° :	752 745 534 ly
z: 4.00 :	43" :	218 675 ly;	43' :	13 120 401 ly;	43° :	769 872 902 ly
z: 4.00 :	44" :	223 760 ly;	44' :	13 425 522 ly;	44° :	786 944 428 ly
z: 4.00 :	45" :	228 846 ly;	45' :	13 730 644 ly;	45° :	803 958 845 ly
z: 4.00 :	46" :	233 931 ly;	46' :	14 035 765 ly;	46° :	820 914 892 ly
z: 4.00 :	47" :	239 017 ly;	47' :	14 340 886 ly;	47° :	837 811 310 ly
z: 4.00 :	48" :	244 102 ly;	48' :	14 646 006 ly;	48° :	854 646 840 ly
z: 4.00 :	49" :	249 187 ly;	49' :	14 951 127 ly;	49° :	871 420 229 ly
z: 4.00 :	50" :	254 273 ly;	50' :	15 256 247 ly;	50° :	888 130 226 ly
z: 4.00 :	51" :	259 358 ly;	51' :	15 561 367 ly;	51° :	904 775 581 ly
z: 4.00 :	52" :	264 444 ly;	52' :	15 866 486 ly;	52° :	921 355 049 ly
z: 4.00 :	53" :	269 529 ly;	53' :	16 171 605 ly;	53° :	937 867 387 ly
z: 4.00 :	54" :	274 615 ly;	54' :	16 476 724 ly;	54° :	954 311 355 ly
z: 4.00 :	55" :	279 700 ly;	55' :	16 781 842 ly;	55° :	970 685 718 ly
z: 4.00 :	56" :	284 786 ly;	56' :	17 086 960 ly;	56° :	986 989 241 ly
z: 4.00 :	57" :	289 871 ly;	57' :	17 392 078 ly;	57° :	1 003 220 695 ly
z: 4.00 :	58" :	294 957 ly;	58' :	17 697 195 ly;	58° :	1 019 378 853 ly
z: 4.00 :	59" :	300 042 ly;	59' :	18 002 313 ly;	59° :	1 035 462 493 ly
z: 5.00 :	1" :	3 592 ly;	1' :	215 476 ly;	1° :	12 928 403 ly
z: 5.00 :	2" :	7 183 ly;	2' :	430 952 ly;	2° :	25 855 850 ly
z: 5.00 :	3" :	10 774 ly;	3' :	646 428 ly;	3° :	38 781 384 ly
z: 5.00 :	4" :	14 365 ly;	4' :	861 904 ly;	4° :	51 704 049 ly
z: 5.00 :	5" :	17 956 ly;	5' :	1 077 380 ly;	5° :	64 622 889 ly
z: 5.00 :	6" :	21 548 ly;	6' :	1 292 856 ly;	6° :	77 536 948 ly
z: 5.00 :	7" :	25 139 ly;	7' :	1 508 332 ly;	7° :	90 445 270 ly
z: 5.00 :	8" :	28 730 ly;	8' :	1 723 808 ly;	8° :	103 346 900 ly
z: 5.00 :	9" :	32 321 ly;	9' :	1 939 284 ly;	9° :	116 240 883 ly
z: 5.00 :	10" :	35 913 ly;	10' :	2 154 760 ly;	10° :	129 126 265 ly
z: 5.00 :	11" :	39 504 ly;	11' :	2 370 236 ly;	11° :	142 002 091 ly
z: 5.00 :	12" :	43 095 ly;	12' :	2 585 711 ly;	12° :	154 867 409 ly
z: 5.00 :	13" :	46 686 ly;	13' :	2 801 187 ly;	13° :	167 721 265 ly
z: 5.00 :	14" :	50 278 ly;	14' :	3 016 663 ly;	14° :	180 562 707 ly
z: 5.00 :	15" :	53 869 ly;	15' :	3 232 138 ly;	15° :	193 390 783 ly
z: 5.00 :	16" :	57 460 ly;	16' :	3 447 614 ly;	16° :	206 204 544 ly
z: 5.00 :	17" :	61 052 ly;	17' :	3 663 089 ly;	17° :	219 003 038 ly
z: 5.00 :	18" :	64 643 ly;	18' :	3 878 565 ly;	18° :	231 785 317 ly
z: 5.00 :	19" :	68 234 ly;	19' :	4 094 040 ly;	19° :	244 550 433 ly
z: 5.00 :	20" :	71 825 ly;	20' :	4 309 515 ly;	20° :	257 297 439 ly
z: 5.00 :	21" :	75 417 ly;	21' :	4 524 990 ly;	21° :	270 025 388 ly
z: 5.00 :	22" :	79 008 ly;	22' :	4 740 465 ly;	22° :	282 733 336 ly
z: 5.00 :	23" :	82 599 ly;	23' :	4 955 940 ly;	23° :	295 420 338 ly
z: 5.00 :	24" :	86 190 ly;	24' :	5 171 415 ly;	24° :	308 085 453 ly
z: 5.00 :	25" :	89 782 ly;	25' :	5 386 890 ly;	25° :	320 727 737 ly
z: 5.00 :	26" :	93 373 ly;	26' :	5 602 364 ly;	26° :	333 346 253 ly
z: 5.00 :	27" :	96 964 ly;	27' :	5 817 839 ly;	27° :	345 940 060 ly
z: 5.00 :	28" :	100 556 ly;	28' :	6 033 313 ly;	28° :	358 508 222 ly
z: 5.00 :	29" :	104 147 ly;	29' :	6 248 787 ly;	29° :	371 049 802 ly
z: 5.00 :	30" :	107 738 ly;	30' :	6 464 261 ly;	30° :	383 563 867 ly
z: 5.00 :	31" :	111 329 ly;	31' :	6 679 735 ly;	31° :	396 049 484 ly
z: 5.00 :	32" :	114 921 ly;	32' :	6 895 209 ly;	32° :	408 505 722 ly
z: 5.00 :	33" :	118 512 ly;	33' :	7 110 683 ly;	33° :	420 931 651 ly
z: 5.00 :	34" :	122 103 ly;	34' :	7 326 157 ly;	34° :	433 326 344 ly
z: 5.00 :	35" :	125 694 ly;	35' :	7 541 630 ly;	35° :	445 688 875 ly
z: 5.00 :	36" :	129 286 ly;	36' :	7 757 103 ly;	36° :	458 018 321 ly
z: 5.00 :	37" :	132 877 ly;	37' :	7 972 576 ly;	37° :	470 313 760 ly
z: 5.00 :	38" :	136 468 ly;	38' :	8 188 049 ly;	38° :	482 574 271 ly
z: 5.00 :	39" :	140 059 ly;	39' :	8 403 522 ly;	39° :	494 798 938 ly
z: 5.00 :	40" :	143 651 ly;	40' :	8 618 995 ly;	40° :	506 986 844 ly

z: 5.00 :	41" :	147 242 ly;	41' :	8 834 467 ly;	41° :	519 137 075 ly
z: 5.00 :	42" :	150 833 ly;	42' :	9 049 939 ly;	42° :	531 248 722 ly
z: 5.00 :	43" :	154 425 ly;	43' :	9 265 411 ly;	43° :	543 320 874 ly
z: 5.00 :	44" :	158 016 ly;	44' :	9 480 883 ly;	44° :	555 352 626 ly
z: 5.00 :	45" :	161 607 ly;	45' :	9 696 355 ly;	45° :	567 343 072 ly
z: 5.00 :	46" :	165 198 ly;	46' :	9 911 826 ly;	46° :	579 291 312 ly
z: 5.00 :	47" :	168 790 ly;	47' :	10 127 298 ly;	47° :	591 196 446 ly
z: 5.00 :	48" :	172 381 ly;	48' :	10 342 769 ly;	48° :	603 057 577 ly
z: 5.00 :	49" :	175 972 ly;	49' :	10 558 239 ly;	49° :	614 873 813 ly
z: 5.00 :	50" :	179 563 ly;	50' :	10 773 710 ly;	50° :	626 644 261 ly
z: 5.00 :	51" :	183 155 ly;	51' :	10 989 180 ly;	51° :	638 368 033 ly
z: 5.00 :	52" :	186 746 ly;	52' :	11 204 651 ly;	52° :	650 044 245 ly
z: 5.00 :	53" :	190 337 ly;	53' :	11 420 121 ly;	53° :	661 672 012 ly
z: 5.00 :	54" :	193 928 ly;	54' :	11 635 590 ly;	54° :	673 250 456 ly
z: 5.00 :	55" :	197 520 ly;	55' :	11 851 060 ly;	55° :	684 778 700 ly
z: 5.00 :	56" :	201 111 ly;	56' :	12 066 529 ly;	56° :	696 255 871 ly
z: 5.00 :	57" :	204 702 ly;	57' :	12 281 998 ly;	57° :	707 681 097 ly
z: 5.00 :	58" :	208 294 ly;	58' :	12 497 467 ly;	58° :	719 053 513 ly
z: 5.00 :	59" :	211 885 ly;	59' :	12 712 935 ly;	59° :	730 372 254 ly
z: 6.00 :	1" :	2 663 ly;	1' :	159 800 ly;	1° :	9 587 873 ly
z: 6.00 :	2" :	5 327 ly;	2' :	319 600 ly;	2° :	19 175 026 ly
z: 6.00 :	3" :	7 990 ly;	3' :	479 400 ly;	3° :	28 760 743 ly
z: 6.00 :	4" :	10 653 ly;	4' :	639 199 ly;	4° :	38 344 304 ly
z: 6.00 :	5" :	13 317 ly;	5' :	798 999 ly;	5° :	47 924 990 ly
z: 6.00 :	6" :	15 980 ly;	6' :	958 799 ly;	6° :	57 502 084 ly
z: 6.00 :	7" :	18 643 ly;	7' :	1 118 599 ly;	7° :	67 074 868 ly
z: 6.00 :	8" :	21 307 ly;	8' :	1 278 399 ly;	8° :	76 642 623 ly
z: 6.00 :	9" :	23 970 ly;	9' :	1 438 198 ly;	9° :	86 204 633 ly
z: 6.00 :	10" :	26 633 ly;	10' :	1 597 998 ly;	10° :	95 760 180 ly
z: 6.00 :	11" :	29 297 ly;	11' :	1 757 798 ly;	11° :	105 308 548 ly
z: 6.00 :	12" :	31 960 ly;	12' :	1 917 598 ly;	12° :	114 849 021 ly
z: 6.00 :	13" :	34 623 ly;	13' :	2 077 397 ly;	13° :	124 380 883 ly
z: 6.00 :	14" :	37 287 ly;	14' :	2 237 197 ly;	14° :	133 903 419 ly
z: 6.00 :	15" :	39 950 ly;	15' :	2 396 996 ly;	15° :	143 415 916 ly
z: 6.00 :	16" :	42 613 ly;	16' :	2 556 796 ly;	16° :	152 917 658 ly
z: 6.00 :	17" :	45 277 ly;	17' :	2 716 595 ly;	17° :	162 407 933 ly
z: 6.00 :	18" :	47 940 ly;	18' :	2 876 394 ly;	18° :	171 886 029 ly
z: 6.00 :	19" :	50 603 ly;	19' :	3 036 194 ly;	19° :	181 351 234 ly
z: 6.00 :	20" :	53 267 ly;	20' :	3 195 993 ly;	20° :	190 802 837 ly
z: 6.00 :	21" :	55 930 ly;	21' :	3 355 792 ly;	21° :	200 240 130 ly
z: 6.00 :	22" :	58 593 ly;	22' :	3 515 591 ly;	22° :	209 662 402 ly
z: 6.00 :	23" :	61 257 ly;	23' :	3 675 390 ly;	23° :	219 068 947 ly
z: 6.00 :	24" :	63 920 ly;	24' :	3 835 189 ly;	24° :	228 459 057 ly
z: 6.00 :	25" :	66 583 ly;	25' :	3 994 988 ly;	25° :	237 832 027 ly
z: 6.00 :	26" :	69 247 ly;	26' :	4 154 787 ly;	26° :	247 187 152 ly
z: 6.00 :	27" :	71 910 ly;	27' :	4 314 586 ly;	27° :	256 523 729 ly
z: 6.00 :	28" :	74 573 ly;	28' :	4 474 384 ly;	28° :	265 841 055 ly
z: 6.00 :	29" :	77 237 ly;	29' :	4 634 183 ly;	29° :	275 138 430 ly
z: 6.00 :	30" :	79 900 ly;	30' :	4 793 981 ly;	30° :	284 415 154 ly
z: 6.00 :	31" :	82 563 ly;	31' :	4 953 780 ly;	31° :	293 670 530 ly
z: 6.00 :	32" :	85 227 ly;	32' :	5 113 578 ly;	32° :	302 903 859 ly
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z: 6.00 :	34" :	90 553 ly;	34' :	5 433 174 ly;	34° :	321 301 600 ly
z: 6.00 :	35" :	93 217 ly;	35' :	5 592 972 ly;	35° :	330 464 627 ly
z: 6.00 :	36" :	95 880 ly;	36' :	5 752 770 ly;	36° :	339 602 835 ly
z: 6.00 :	37" :	98 543 ly;	37' :	5 912 567 ly;	37° :	348 715 536 ly
z: 6.00 :	38" :	101 207 ly;	38' :	6 072 365 ly;	38° :	357 802 043 ly
z: 6.00 :	39" :	103 870 ly;	39' :	6 232 162 ly;	39° :	366 861 671 ly
z: 6.00 :	40" :	106 533 ly;	40' :	6 391 959 ly;	40° :	375 893 735 ly
z: 6.00 :	41" :	109 197 ly;	41' :	6 551 757 ly;	41° :	384 897 554 ly
z: 6.00 :	42" :	111 860 ly;	42' :	6 711 554 ly;	42° :	393 872 447 ly
z: 6.00 :	43" :	114 523 ly;	43' :	6 871 350 ly;	43° :	402 817 738 ly
z: 6.00 :	44" :	117 187 ly;	44' :	7 031 147 ly;	44° :	411 732 748 ly
z: 6.00 :	45" :	119 850 ly;	45' :	7 190 944 ly;	45° :	420 616 806 ly

z: 6.00 :	46" :	122 513 ly;	46' :	7 350 740 ly;	46° :	429 469 237 ly
z: 6.00 :	47" :	125 177 ly;	47' :	7 510 536 ly;	47° :	438 289 374 ly
z: 6.00 :	48" :	127 840 ly;	48' :	7 670 333 ly;	48° :	447 076 548 ly
z: 6.00 :	49" :	130 503 ly;	49' :	7 830 129 ly;	49° :	455 830 093 ly
z: 6.00 :	50" :	133 167 ly;	50' :	7 989 924 ly;	50° :	464 549 347 ly
z: 6.00 :	51" :	135 830 ly;	51' :	8 149 720 ly;	51° :	473 233 649 ly
z: 6.00 :	52" :	138 493 ly;	52' :	8 309 515 ly;	52° :	481 882 340 ly
z: 6.00 :	53" :	141 157 ly;	53' :	8 469 311 ly;	53° :	490 494 764 ly
z: 6.00 :	54" :	143 820 ly;	54' :	8 629 106 ly;	54° :	499 070 269 ly
z: 6.00 :	55" :	146 483 ly;	55' :	8 788 901 ly;	55° :	507 608 201 ly
z: 6.00 :	56" :	149 147 ly;	56' :	8 948 695 ly;	56° :	516 107 915 ly
z: 6.00 :	57" :	151 810 ly;	57' :	9 108 490 ly;	57° :	524 568 762 ly
z: 6.00 :	58" :	154 473 ly;	58' :	9 268 284 ly;	58° :	532 990 101 ly
z: 6.00 :	59" :	157 137 ly;	59' :	9 428 079 ly;	59° :	541 371 291 ly
z: 7.00 :	1" :	2 050 ly;	1' :	123 055 ly;	1° :	7 383 222 ly
z: 7.00 :	2" :	4 101 ly;	2' :	246 110 ly;	2° :	14 765 887 ly
z: 7.00 :	3" :	6 153 ly;	3' :	369 166 ly;	3° :	22 147 438 ly
z: 7.00 :	4" :	8 204 ly;	4' :	492 221 ly;	4° :	29 527 318 ly
z: 7.00 :	5" :	10 254 ly;	5' :	615 276 ly;	5° :	36 904 971 ly
z: 7.00 :	6" :	12 305 ly;	6' :	738 331 ly;	6° :	44 279 839 ly
z: 7.00 :	7" :	14 356 ly;	7' :	861 387 ly;	7° :	51 651 366 ly
z: 7.00 :	8" :	16 407 ly;	8' :	984 442 ly;	8° :	59 018 997 ly
z: 7.00 :	9" :	18 458 ly;	9' :	1 107 497 ly;	9° :	66 382 174 ly
z: 7.00 :	10" :	20 509 ly;	10' :	1 230 552 ly;	10° :	73 740 343 ly
z: 7.00 :	11" :	22 560 ly;	11' :	1 353 607 ly;	11° :	81 092 948 ly
z: 7.00 :	12" :	24 611 ly;	12' :	1 476 662 ly;	12° :	88 439 434 ly
z: 7.00 :	13" :	26 662 ly;	13' :	1 599 717 ly;	13° :	95 779 247 ly
z: 7.00 :	14" :	28 713 ly;	14' :	1 722 772 ly;	14° :	103 111 833 ly
z: 7.00 :	15" :	30 764 ly;	15' :	1 845 827 ly;	15° :	110 436 639 ly
z: 7.00 :	16" :	32 815 ly;	16' :	1 968 882 ly;	16° :	117 753 110 ly
z: 7.00 :	17" :	34 866 ly;	17' :	2 091 937 ly;	17° :	125 060 696 ly
z: 7.00 :	18" :	36 917 ly;	18' :	2 214 992 ly;	18° :	132 358 844 ly
z: 7.00 :	19" :	38 967 ly;	19' :	2 338 047 ly;	19° :	139 647 003 ly
z: 7.00 :	20" :	41 018 ly;	20' :	2 461 102 ly;	20° :	146 924 623 ly
z: 7.00 :	21" :	43 069 ly;	21' :	2 584 156 ly;	21° :	154 191 154 ly
z: 7.00 :	22" :	45 120 ly;	22' :	2 707 211 ly;	22° :	161 446 048 ly
z: 7.00 :	23" :	47 171 ly;	23' :	2 830 266 ly;	23° :	168 688 756 ly
z: 7.00 :	24" :	49 222 ly;	24' :	2 953 320 ly;	24° :	175 918 731 ly
z: 7.00 :	25" :	51 273 ly;	25' :	3 076 375 ly;	25° :	183 135 426 ly
z: 7.00 :	26" :	53 324 ly;	26' :	3 199 429 ly;	26° :	190 338 297 ly
z: 7.00 :	27" :	55 375 ly;	27' :	3 322 483 ly;	27° :	197 526 799 ly
z: 7.00 :	28" :	57 426 ly;	28' :	3 445 538 ly;	28° :	204 700 389 ly
z: 7.00 :	29" :	59 477 ly;	29' :	3 568 592 ly;	29° :	211 858 524 ly
z: 7.00 :	30" :	61 528 ly;	30' :	3 691 646 ly;	30° :	219 000 663 ly
z: 7.00 :	31" :	63 579 ly;	31' :	3 814 700 ly;	31° :	226 126 265 ly
z: 7.00 :	32" :	65 629 ly;	32' :	3 937 754 ly;	32° :	233 234 793 ly
z: 7.00 :	33" :	67 680 ly;	33' :	4 060 808 ly;	33° :	240 325 707 ly
z: 7.00 :	34" :	69 731 ly;	34' :	4 183 862 ly;	34° :	247 398 473 ly
z: 7.00 :	35" :	71 782 ly;	35' :	4 306 915 ly;	35° :	254 452 553 ly
z: 7.00 :	36" :	73 833 ly;	36' :	4 429 969 ly;	36° :	261 487 415 ly
z: 7.00 :	37" :	75 884 ly;	37' :	4 553 022 ly;	37° :	268 502 526 ly
z: 7.00 :	38" :	77 935 ly;	38' :	4 676 076 ly;	38° :	275 497 354 ly
z: 7.00 :	39" :	79 986 ly;	39' :	4 799 129 ly;	39° :	282 471 370 ly
z: 7.00 :	40" :	82 037 ly;	40' :	4 922 182 ly;	40° :	289 424 045 ly
z: 7.00 :	41" :	84 088 ly;	41' :	5 045 236 ly;	41° :	296 354 854 ly
z: 7.00 :	42" :	86 139 ly;	42' :	5 168 289 ly;	42° :	303 263 270 ly
z: 7.00 :	43" :	88 190 ly;	43' :	5 291 342 ly;	43° :	310 148 770 ly
z: 7.00 :	44" :	90 240 ly;	44' :	5 414 394 ly;	44° :	317 010 831 ly
z: 7.00 :	45" :	92 291 ly;	45' :	5 537 447 ly;	45° :	323 848 934 ly
z: 7.00 :	46" :	94 342 ly;	46' :	5 660 500 ly;	46° :	330 662 560 ly
z: 7.00 :	47" :	96 393 ly;	47' :	5 783 552 ly;	47° :	337 451 192 ly
z: 7.00 :	48" :	98 444 ly;	48' :	5 906 604 ly;	48° :	344 214 315 ly
z: 7.00 :	49" :	100 495 ly;	49' :	6 029 657 ly;	49° :	350 951 415 ly
z: 7.00 :	50" :	102 546 ly;	50' :	6 152 709 ly;	50° :	357 661 982 ly

z: 7.00 :	51":	104 597 ly;	51':	6 275 761 ly;	51°:	364 345 504 ly
z: 7.00 :	52":	106 648 ly;	52':	6 398 813 ly;	52°:	371 001 476 ly
z: 7.00 :	53":	108 699 ly;	53':	6 521 864 ly;	53°:	377 629 390 ly
z: 7.00 :	54":	110 750 ly;	54':	6 644 916 ly;	54°:	384 228 744 ly
z: 7.00 :	55":	112 801 ly;	55':	6 767 967 ly;	55°:	390 799 035 ly
z: 7.00 :	56":	114 852 ly;	56':	6 891 018 ly;	56°:	397 339 764 ly
z: 7.00 :	57":	116 902 ly;	57':	7 014 070 ly;	57°:	403 850 434 ly
z: 7.00 :	58":	118 953 ly;	58':	7 137 121 ly;	58°:	410 330 550 ly
z: 7.00 :	59":	121 004 ly;	59':	7 260 171 ly;	59°:	416 779 617 ly
z: 8.00 :	1":	1 626 ly;	1':	97 600 ly;	1°:	5 855 944 ly
z: 8.00 :	2":	3 253 ly;	2':	195 201 ly;	2°:	11 711 445 ly
z: 8.00 :	3":	4 880 ly;	3':	292 801 ly;	3°:	17 566 059 ly
z: 8.00 :	4":	6 507 ly;	4':	390 401 ly;	4°:	23 419 343 ly
z: 8.00 :	5":	8 133 ly;	5':	488 001 ly;	5°:	29 270 854 ly
z: 8.00 :	6":	9 760 ly;	6':	585 602 ly;	6°:	35 120 149 ly
z: 8.00 :	7":	11 387 ly;	7':	683 202 ly;	7°:	40 966 785 ly
z: 8.00 :	8":	13 013 ly;	8':	780 802 ly;	8°:	46 810 319 ly
z: 8.00 :	9":	14 640 ly;	9':	878 402 ly;	9°:	52 650 310 ly
z: 8.00 :	10":	16 267 ly;	10':	976 003 ly;	10°:	58 486 314 ly
z: 8.00 :	11":	17 893 ly;	11':	1 073 603 ly;	11°:	64 317 890 ly
z: 8.00 :	12":	19 520 ly;	12':	1 171 203 ly;	12°:	70 144 596 ly
z: 8.00 :	13":	21 147 ly;	13':	1 268 803 ly;	13°:	75 965 992 ly
z: 8.00 :	14":	22 773 ly;	14':	1 366 403 ly;	14°:	81 781 635 ly
z: 8.00 :	15":	24 400 ly;	15':	1 464 003 ly;	15°:	87 591 087 ly
z: 8.00 :	16":	26 027 ly;	16':	1 561 603 ly;	16°:	93 393 906 ly
z: 8.00 :	17":	27 653 ly;	17':	1 659 203 ly;	17°:	99 189 653 ly
z: 8.00 :	18":	29 280 ly;	18':	1 756 803 ly;	18°:	104 977 890 ly
z: 8.00 :	19":	30 907 ly;	19':	1 854 403 ly;	19°:	110 758 178 ly
z: 8.00 :	20":	32 533 ly;	20':	1 952 003 ly;	20°:	116 530 079 ly
z: 8.00 :	21":	34 160 ly;	21':	2 049 603 ly;	21°:	122 293 155 ly
z: 8.00 :	22":	35 787 ly;	22':	2 147 203 ly;	22°:	128 046 970 ly
z: 8.00 :	23":	37 413 ly;	23':	2 244 803 ly;	23°:	133 791 089 ly
z: 8.00 :	24":	39 040 ly;	24':	2 342 402 ly;	24°:	139 525 075 ly
z: 8.00 :	25":	40 667 ly;	25':	2 440 002 ly;	25°:	145 248 495 ly
z: 8.00 :	26":	42 293 ly;	26':	2 537 602 ly;	26°:	150 960 914 ly
z: 8.00 :	27":	43 920 ly;	27':	2 635 201 ly;	27°:	156 661 900 ly
z: 8.00 :	28":	45 547 ly;	28':	2 732 801 ly;	28°:	162 351 021 ly
z: 8.00 :	29":	47 173 ly;	29':	2 830 400 ly;	29°:	168 027 844 ly
z: 8.00 :	30":	48 800 ly;	30':	2 928 000 ly;	30°:	173 691 940 ly
z: 8.00 :	31":	50 427 ly;	31':	3 025 599 ly;	31°:	179 342 880 ly
z: 8.00 :	32":	52 053 ly;	32':	3 123 198 ly;	32°:	184 980 234 ly
z: 8.00 :	33":	53 680 ly;	33':	3 220 798 ly;	33°:	190 603 576 ly
z: 8.00 :	34":	55 307 ly;	34':	3 318 397 ly;	34°:	196 212 478 ly
z: 8.00 :	35":	56 933 ly;	35':	3 415 996 ly;	35°:	201 806 516 ly
z: 8.00 :	36":	58 560 ly;	36':	3 513 595 ly;	36°:	207 385 264 ly
z: 8.00 :	37":	60 187 ly;	37':	3 611 194 ly;	37°:	212 948 300 ly
z: 8.00 :	38":	61 814 ly;	38':	3 708 793 ly;	38°:	218 495 202 ly
z: 8.00 :	39":	63 440 ly;	39':	3 806 391 ly;	39°:	224 025 548 ly
z: 8.00 :	40":	65 067 ly;	40':	3 903 990 ly;	40°:	229 538 919 ly
z: 8.00 :	41":	66 694 ly;	41':	4 001 589 ly;	41°:	235 034 896 ly
z: 8.00 :	42":	68 320 ly;	42':	4 099 187 ly;	42°:	240 513 062 ly
z: 8.00 :	43":	69 947 ly;	43':	4 196 786 ly;	43°:	245 973 002 ly
z: 8.00 :	44":	71 574 ly;	44':	4 294 384 ly;	44°:	251 414 299 ly
z: 8.00 :	45":	73 200 ly;	45':	4 391 982 ly;	45°:	256 836 542 ly
z: 8.00 :	46":	74 827 ly;	46':	4 489 580 ly;	46°:	262 239 318 ly
z: 8.00 :	47":	76 454 ly;	47':	4 587 178 ly;	47°:	267 622 217 ly
z: 8.00 :	48":	78 080 ly;	48':	4 684 776 ly;	48°:	272 984 829 ly
z: 8.00 :	49":	79 707 ly;	49':	4 782 374 ly;	49°:	278 326 748 ly
z: 8.00 :	50":	81 334 ly;	50':	4 879 972 ly;	50°:	283 647 567 ly
z: 8.00 :	51":	82 960 ly;	51':	4 977 570 ly;	51°:	288 946 882 ly
z: 8.00 :	52":	84 587 ly;	52':	5 075 167 ly;	52°:	294 224 289 ly
z: 8.00 :	53":	86 214 ly;	53':	5 172 765 ly;	53°:	299 479 388 ly
z: 8.00 :	54":	87 840 ly;	54':	5 270 362 ly;	54°:	304 711 779 ly
z: 8.00 :	55":	89 467 ly;	55':	5 367 959 ly;	55°:	309 921 063 ly

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z: 8.00 :	57":	92 720 ly;	57':	5 563 154 ly;	57°:	320 268 730 ly
z: 8.00 :	58":	94 347 ly;	58':	5 660 751 ly;	58°:	325 406 325 ly
z: 8.00 :	59":	95 974 ly;	59':	5 758 347 ly;	59°:	330 519 239 ly
z: 9.00 :	1":	1 321 ly;	1':	79 266 ly;	1°:	4 755 917 ly
z: 9.00 :	2":	2 643 ly;	2':	158 533 ly;	2°:	9 511 473 ly
z: 9.00 :	3":	3 963 ly;	3':	237 799 ly;	3°:	14 266 308 ly
z: 9.00 :	4":	5 284 ly;	4':	317 065 ly;	4°:	19 020 061 ly
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z: 9.00 :	6":	7 927 ly;	6':	475 598 ly;	6°:	28 522 877 ly
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z: 9.00 :	8":	10 569 ly;	8':	634 130 ly;	8°:	38 017 038 ly
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z: 9.00 :	10":	13 211 ly;	10':	792 663 ly;	10°:	47 499 663 ly
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z: 9.00 :	12":	15 853 ly;	12':	951 195 ly;	12°:	56 967 875 ly
z: 9.00 :	13":	17 174 ly;	13':	1 030 461 ly;	13°:	61 695 678 ly
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z: 9.00 :	16":	21 138 ly;	16':	1 268 259 ly;	16°:	75 849 570 ly
z: 9.00 :	17":	22 459 ly;	17':	1 347 526 ly;	17°:	80 556 502 ly
z: 9.00 :	18":	23 780 ly;	18':	1 426 792 ly;	18°:	85 257 322 ly
z: 9.00 :	19":	25 101 ly;	19':	1 506 058 ly;	19°:	89 951 674 ly
z: 9.00 :	20":	26 422 ly;	20':	1 585 324 ly;	20°:	94 639 201 ly
z: 9.00 :	21":	27 743 ly;	21':	1 664 589 ly;	21°:	99 319 548 ly
z: 9.00 :	22":	29 064 ly;	22':	1 743 855 ly;	22°:	103 992 359 ly
z: 9.00 :	23":	30 385 ly;	23':	1 823 121 ly;	23°:	108 657 280 ly
z: 9.00 :	24":	31 707 ly;	24':	1 902 387 ly;	24°:	113 313 956 ly
z: 9.00 :	25":	33 028 ly;	25':	1 981 653 ly;	25°:	117 962 035 ly
z: 9.00 :	26":	34 349 ly;	26':	2 060 919 ly;	26°:	122 601 163 ly
z: 9.00 :	27":	35 670 ly;	27':	2 140 184 ly;	27°:	127 230 988 ly
z: 9.00 :	28":	36 991 ly;	28':	2 219 450 ly;	28°:	131 851 158 ly
z: 9.00 :	29":	38 312 ly;	29':	2 298 716 ly;	29°:	136 461 324 ly
z: 9.00 :	30":	39 633 ly;	30':	2 377 981 ly;	30°:	141 061 134 ly
z: 9.00 :	31":	40 954 ly;	31':	2 457 247 ly;	31°:	145 650 240 ly
z: 9.00 :	32":	42 275 ly;	32':	2 536 512 ly;	32°:	150 228 292 ly
z: 9.00 :	33":	43 596 ly;	33':	2 615 777 ly;	33°:	154 794 944 ly
z: 9.00 :	34":	44 918 ly;	34':	2 695 043 ly;	34°:	159 349 849 ly
z: 9.00 :	35":	46 239 ly;	35':	2 774 308 ly;	35°:	163 892 659 ly
z: 9.00 :	36":	47 560 ly;	36':	2 853 573 ly;	36°:	168 423 032 ly
z: 9.00 :	37":	48 881 ly;	37':	2 932 839 ly;	37°:	172 940 621 ly
z: 9.00 :	38":	50 202 ly;	38':	3 012 104 ly;	38°:	177 445 085 ly
z: 9.00 :	39":	51 523 ly;	39':	3 091 369 ly;	39°:	181 936 080 ly
z: 9.00 :	40":	52 844 ly;	40':	3 170 634 ly;	40°:	186 413 265 ly
z: 9.00 :	41":	54 165 ly;	41':	3 249 899 ly;	41°:	190 876 301 ly
z: 9.00 :	42":	55 486 ly;	42':	3 329 163 ly;	42°:	195 324 848 ly
z: 9.00 :	43":	56 808 ly;	43':	3 408 428 ly;	43°:	199 758 568 ly
z: 9.00 :	44":	58 129 ly;	44':	3 487 693 ly;	44°:	204 177 124 ly
z: 9.00 :	45":	59 450 ly;	45':	3 566 958 ly;	45°:	208 580 180 ly
z: 9.00 :	46":	60 771 ly;	46':	3 646 222 ly;	46°:	212 967 401 ly
z: 9.00 :	47":	62 092 ly;	47':	3 725 487 ly;	47°:	217 338 453 ly
z: 9.00 :	48":	63 413 ly;	48':	3 804 751 ly;	48°:	221 693 005 ly
z: 9.00 :	49":	64 734 ly;	49':	3 884 015 ly;	49°:	226 030 726 ly
z: 9.00 :	50":	66 055 ly;	50':	3 963 280 ly;	50°:	230 351 284 ly
z: 9.00 :	51":	67 376 ly;	51':	4 042 544 ly;	51°:	234 654 352 ly
z: 9.00 :	52":	68 697 ly;	52':	4 121 808 ly;	52°:	238 939 602 ly
z: 9.00 :	53":	70 019 ly;	53':	4 201 072 ly;	53°:	243 206 708 ly
z: 9.00 :	54":	71 340 ly;	54':	4 280 336 ly;	54°:	247 455 346 ly
z: 9.00 :	55":	72 661 ly;	55':	4 359 600 ly;	55°:	251 685 192 ly
z: 9.00 :	56":	73 982 ly;	56':	4 438 863 ly;	56°:	255 895 924 ly
z: 9.00 :	57":	75 303 ly;	57':	4 518 127 ly;	57°:	260 087 222 ly
z: 9.00 :	58":	76 624 ly;	58':	4 597 390 ly;	58°:	264 258 767 ly
z: 9.00 :	59":	77 945 ly;	59':	4 676 654 ly;	59°:	268 410 241 ly

z: 10.0	:	1":	1 093 ly;	1':	65 635 ly;	1°:	3 938 075 ly
z: 10.0	:	2":	2 187 ly;	2':	131 271 ly;	2°:	7 875 851 ly
z: 10.0	:	3":	3 281 ly;	3':	196 906 ly;	3°:	11 813 028 ly
z: 10.0	:	4":	4 376 ly;	4':	262 542 ly;	4°:	15 749 309 ly
z: 10.0	:	5":	5 469 ly;	5':	328 177 ly;	5°:	19 684 393 ly
z: 10.0	:	6":	6 563 ly;	6':	393 812 ly;	6°:	23 617 982 ly
z: 10.0	:	7":	7 657 ly;	7':	459 448 ly;	7°:	27 549 777 ly
z: 10.0	:	8":	8 751 ly;	8':	525 083 ly;	8°:	31 479 480 ly
z: 10.0	:	9":	9 845 ly;	9':	590 719 ly;	9°:	35 406 792 ly
z: 10.0	:	10":	10 939 ly;	10':	656 354 ly;	10°:	39 331 414 ly
z: 10.0	:	11":	12 033 ly;	11':	721 989 ly;	11°:	43 253 049 ly
z: 10.0	:	12":	13 127 ly;	12':	787 625 ly;	12°:	47 171 399 ly
z: 10.0	:	13":	14 221 ly;	13':	853 260 ly;	13°:	51 086 166 ly
z: 10.0	:	14":	15 315 ly;	14':	918 895 ly;	14°:	54 997 053 ly
z: 10.0	:	15":	16 409 ly;	15':	984 530 ly;	15°:	58 903 762 ly
z: 10.0	:	16":	17 503 ly;	16':	1 050 166 ly;	16°:	62 805 997 ly
z: 10.0	:	17":	18 597 ly;	17':	1 115 801 ly;	17°:	66 703 462 ly
z: 10.0	:	18":	19 691 ly;	18':	1 181 436 ly;	18°:	70 595 860 ly
z: 10.0	:	19":	20 784 ly;	19':	1 247 071 ly;	19°:	74 482 895 ly
z: 10.0	:	20":	21 878 ly;	20':	1 312 706 ly;	20°:	78 364 273 ly
z: 10.0	:	21":	22 972 ly;	21':	1 378 342 ly;	21°:	82 239 699 ly
z: 10.0	:	22":	24 066 ly;	22':	1 443 977 ly;	22°:	86 108 877 ly
z: 10.0	:	23":	25 160 ly;	23':	1 509 612 ly;	23°:	89 971 514 ly
z: 10.0	:	24":	26 254 ly;	24':	1 575 247 ly;	24°:	93 827 317 ly
z: 10.0	:	25":	27 348 ly;	25':	1 640 882 ly;	25°:	97 675 993 ly
z: 10.0	:	26":	28 442 ly;	26':	1 706 517 ly;	26°:	101 517 248 ly
z: 10.0	:	27":	29 536 ly;	27':	1 772 152 ly;	27°:	105 350 792 ly
z: 10.0	:	28":	30 630 ly;	28':	1 837 786 ly;	28°:	109 176 332 ly
z: 10.0	:	29":	31 724 ly;	29':	1 903 421 ly;	29°:	112 993 579 ly
z: 10.0	:	30":	32 818 ly;	30':	1 969 056 ly;	30°:	116 802 241 ly
z: 10.0	:	31":	33 912 ly;	31':	2 034 691 ly;	31°:	120 602 031 ly
z: 10.0	:	32":	35 006 ly;	32':	2 100 326 ly;	32°:	124 392 657 ly
z: 10.0	:	33":	36 099 ly;	33':	2 165 960 ly;	33°:	128 173 834 ly
z: 10.0	:	34":	37 193 ly;	34':	2 231 595 ly;	34°:	131 945 273 ly
z: 10.0	:	35":	38 287 ly;	35':	2 297 230 ly;	35°:	135 706 687 ly
z: 10.0	:	36":	39 381 ly;	36':	2 362 864 ly;	36°:	139 457 790 ly
z: 10.0	:	37":	40 475 ly;	37':	2 428 499 ly;	37°:	143 198 298 ly
z: 10.0	:	38":	41 569 ly;	38':	2 494 133 ly;	38°:	146 927 926 ly
z: 10.0	:	39":	42 663 ly;	39':	2 559 767 ly;	39°:	150 646 390 ly
z: 10.0	:	40":	43 757 ly;	40':	2 625 402 ly;	40°:	154 353 408 ly
z: 10.0	:	41":	44 851 ly;	41':	2 691 036 ly;	41°:	158 048 697 ly
z: 10.0	:	42":	45 945 ly;	42':	2 756 670 ly;	42°:	161 731 977 ly
z: 10.0	:	43":	47 039 ly;	43':	2 822 304 ly;	43°:	165 402 968 ly
z: 10.0	:	44":	48 133 ly;	44':	2 887 938 ly;	44°:	169 061 390 ly
z: 10.0	:	45":	49 227 ly;	45':	2 953 573 ly;	45°:	172 706 965 ly
z: 10.0	:	46":	50 320 ly;	46':	3 019 207 ly;	46°:	176 339 416 ly
z: 10.0	:	47":	51 414 ly;	47':	3 084 840 ly;	47°:	179 958 466 ly
z: 10.0	:	48":	52 508 ly;	48':	3 150 474 ly;	48°:	183 563 840 ly
z: 10.0	:	49":	53 602 ly;	49':	3 216 108 ly;	49°:	187 155 264 ly
z: 10.0	:	50":	54 696 ly;	50':	3 281 742 ly;	50°:	190 732 465 ly
z: 10.0	:	51":	55 790 ly;	51':	3 347 375 ly;	51°:	194 295 170 ly
z: 10.0	:	52":	56 884 ly;	52':	3 413 009 ly;	52°:	197 843 108 ly
z: 10.0	:	53":	57 978 ly;	53':	3 478 642 ly;	53°:	201 376 010 ly
z: 10.0	:	54":	59 072 ly;	54':	3 544 276 ly;	54°:	204 893 605 ly
z: 10.0	:	55":	60 166 ly;	55':	3 609 909 ly;	55°:	208 395 627 ly
z: 10.0	:	56":	61 260 ly;	56':	3 675 543 ly;	56°:	211 881 810 ly
z: 10.0	:	57":	62 354 ly;	57':	3 741 176 ly;	57°:	215 351 887 ly
z: 10.0	:	58":	63 448 ly;	58':	3 806 809 ly;	58°:	218 805 594 ly
z: 10.0	:	59":	64 541 ly;	59':	3 872 442 ly;	59°:	222 242 669 ly

Giant Arc from (z=0.81,13:30",40°) to (z=0.81,15:00",40°) using 3S-geometry: 1 308 215 758 ly