GEAR CHARTS

Sakura Final Drive Ratio Conversion Methods

(Spur Gear) ÷ (Pinion) × (Internal Ratio)

Sakura Gear Charts (38T/20T Pulleys-ratio 1.9)

Final Drive Ratio Chart- 48 Pitch

Spur Gear Size

Pinion Gear	70	71	72	73	74	75	76	77	78	79	80	81	82
16													9.74
17												9.05	9.16
18											8.44	8.55	8.66
19										7.90	8.00	8.10	8.20
20									7.41	7.51	7.60	7.70	7.79
21								6.97	7.06	7.15	7.24	7.33	7.42
22							6.56	6.65	6.74	6.82	6.91	7.00	7.08
23						6.20	6.28	6.36	6.44	6.53	6.61	6.69	6.77
24					5.86	5.94	6.02	6.10	6.18	6.25	6.33	6.41	6.49
25				5.55	5.62	5.70	5.78	5.85	5.93	6.00	6.08	6.16	6.23
26			5.26	5.33	5.41	5.48	5.55	5.63	5.70	5.77	5.85	5.92	5.99
27		5.00	5.07	5.14	5.21	5.28	5.35	5.42	5.49	5.56	5.63	5.70	5.77
28	4.75	4.82	4.89	4.95	5.02	5.09	5.16	5.23	5.29	5.36	5.43	5.50	5.56
29	4.59	4.65	4.72	4.78	4.85	4.91	4.98	5.04	5.11	5.18	5.24	5.31	5.37
30	4.43	4.50	4.56	4.62	4.69	4.75	4.81	4.88	4.94	5.00	5.07	5.13	5.19
31	4.29	4.35	4.41	4.47	4.54	4.60	4.66	4.72	4.78	4.84	4.90	4.96	5.03
32	4.16	4.22	4.28	4.33	4.39	4.45	4.51	4.57	4.63	4.69	4.75	4.81	
33	4.03	4.09	4.15	4.20	4.26	4.32	4.38	4.43	4.49	4.55	4.61		
34	3.91	3.97	4.02	4.08	4.14	4.19	4.25	4.30	4.36	4.41			
35	3.80	3.85	3.91	3.96	4.02	4.07	4.13	4.18	4.23				
36	3.69	3.75	3.80	3.85	3.91	3.96	4.01	4.06					
37	3.59	3.65	3.70	3.75	3.80	3.85	3.90						
38	3.50	3.55	3.60	3.65	3.70	3.75							
39	3.41	3.46	3.51	3.56	3.61								
40	3.33	3.37	3.42	3.47									

Sakura Gear Charts (38T/20T Pulleys-ratio 1.9)

Final Drive Ratio Chart- 64 Pitch

Spur Gear Size

Pinion Gear	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110
21																		9.95
22																	9.41	9.50
23																8.92	9.00	9.09
24															8.47	8.55	8.63	8.71
25														8.06	8.13	8.21	8.28	8.36
26													7.67	7.75	7.82	7.89	7.97	8.04
27												7.32	7.39	7.46	7.53	7.60	7.67	7.74
28											6.99	7.06	7.13	7.19	7.26	7.33	7.40	7.46
29										6.68	6.75	6.81	6.88	6.94	7.01	7.08	7.14	7.21
30									6.40	6.46	6.52	6.59	6.65	6.71	6.78	6.84	6.90	6.97
31								6.13	6.19	6.25	6.31	6.37	6.44	6.50	6.56	6.62	6.68	6.74
32							5.88	5.94	6.00	6.06	6.12	6.18	6.23	6.29	6.35	6.41	6.47	6.53
33						5.64	5.70	5.76	5.82	5.87	5.93	5.99	6.05	6.10	6.16	6.22	6.28	6.33
34					5.42	5.48	5.53	5.59	5.64	5.70	5.76	5.81	5.87	5.92	5.98	6.04	6.09	6.15
35				5.21	5.27	5.32	5.37	5.43	5.48	5.54	5.59	5.65	5.70	5.75	5.81	5.86	5.92	5.97
36			5.01	5.07	5.12	5.17	5.23	5.28	5.33	5.38	5.44	5.49	5.54	5.59	5.65	5.70	5.75	5.81
37		4.83	4.88	4.93	4.98	5.03	5.08	5.14	5.19	5.24	5.29	5.34	5.39	5.44	5.49	5.55	5.60	5.65
38	4.65	4.70	4.75	4.80	4.85	4.90	4.95	5.00	5.05	5.10	5.15	5.20	5.25	5.30	5.35	5.40	5.45	5.50
39	4.53	4.58	4.63	4.68	4.73	4.77	4.82	4.87	4.92	4.97	5.02	5.07	5.12	5.16	5.21	5.26	5.31	5.36
40	4.42	4.47	4.51	4.56	4.61	4.66	4.70	4.75	4.80	4.85	4.89	4.94	4.99	5.04	5.08	5.13	5.18	5.23
41	4.31	4.36	4.40	4.45	4.50	4.54	4.59	4.63	4.68	4.73	4.77	4.82	4.87	4.91	4.96	5.00	5.05	5.10
42	4.21	4.25	4.30	4.34	4.39	4.43	4.48	4.52	4.57	4.61	4.66	4.70	4.75	4.80	4.84	4.89	4.93	
43	4.11	4.15	4.20	4.24	4.29	4.33	4.37	4.42	4.46	4.51	4.55	4.60	4.64	4.68	4.73	4.77		
44	4.02	4.06	4.10	4.15	4.19	4.23	4.28	4.32	4.36	4.40	4.45	4.49	4.53	4.58	4.62			
45	3.93	3.97	4.01	4.05	4.10	4.14	4.18	4.22	4.26	4.31	4.35	4.39	4.43	4.48				
46	3.84	3.88	3.92	3.97	4.01	4.05	4.09	4.13	4.17	4.21	4.25	4.30	4.34					
47	3.76	3.80	3.84	3.88	3.92	3.96	4.00	4.04	4.08	4.12	4.16	4.20						
48	3.68	3.72	3.76	3.80	3.84	3.88	3.92	3.96	4.00	4.04	4.08							
49	3.61	3.64	3.68	3.72	3.76	3.80	3.84	3.88	3.92	3.96								
50	3.53	3.57	3.61	3.65	3.69	3.72	3.76	3.80	3.84									
51	3.46	3.50	3.54	3.58	3.61	3.65	3.69	3.73										
52	3.40	3.43	3.47	3.51	3.54	3.58	3.62											
53	3.33	3.37	3.41	3.44	3.48	3.51												

GEAR CHARTS

Sakura Rollout Conversion Methods

(Tire Diameter) × (π) ÷ (Spur Gear) × (Pinion) ÷ (Internal Ratio)

Sakura Rubber Tire Rollout Chart (63mm Diameter)

Spur Gear 48 Pitch

Spur Gear Size

Pinion Gear	70	71	72	73	74	75	76	77	78	79	80	81	82
16													20.32
17												21.85	21.58
18											23.43	23.14	22.85
19										25.04	24.73	24.42	24.12
20									26.70	26.36	26.03	25.71	25.39
21								28.40	28.03	27.68	27.33	26.99	26.66
22							30.14	29.75	29.37	28.99	28.63	28.28	27.93
23						31.93	31.51	31.10	30.70	30.31	29.93	29.56	29.20
24					33.87	33.32	32.88	32.45	32.04	31.63	31.23	30.85	30.47
25				35.66	35.29	34.71	34.25	33.80	33.37	32.95	32.54	32.13	31.74
26			37.60	37.08	36.70	36.09	35.62	35.16	34.71	34.27	33.84	33.42	33.01
27		39.59	39.04	38.51	38.11	37.48	36.99	36.51	36.04	35.58	35.14	34.71	34.28
28	41.65	41.06	40.49	39.93	39.52	38.87	38.36	37.86	37.37	36.90	36.44	35.99	35.55
29	43.13	42.53	41.94	41.36	40.93	40.26	39.73	39.21	38.71	38.22	37.74	37.28	36.82
30	44.62	43.99	43.38	42.79	42.34	41.65	41.10	40.56	40.04	39.54	39.04	38.56	38.09
31	46.11	45.46	44.83	44.21	43.75	43.03	42.47	41.92	41.38	40.86	40.34	39.85	39.36
32	47.60	46.93	46.27	45.64	45.17	44.42	43.84	43.27	42.71	42.17	41.65	41.13	
33	49.08	48.39	47.72	47.07	46.58	45.81	45.21	44.62	44.05	43.49	42.95		
34	50.57	49.86	49.17	48.49	47.99	47.20	46.58	45.97	45.38	44.81			
35	52.06	51.32	50.61	49.92	49.40	48.59	47.95	47.33	46.72				
36	53.55	52.79	52.06	51.34	50.81	49.98	49.32	48.68					
37	55.03	54.26	53.50	52.77	52.22	51.36	50.69						
38	56.52	55.72	54.95	54.20	53.64	52.75							
39	58.01	57.19	56.40	55.62	55.05								
40	59.49	58.66	57.84	57.05									

Sakura Rubber Tire Rollout Chart (63mm Diameter)

Spur Gear 64 Pitch

Spur Gear Size

Pinion Gear	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110
21																		19.88
22																	21.01	20.82
23																22.17	21.97	21.77
24															23.35	23.14	22.92	22.72
25														24.56	24.33	24.10	23.88	23.66
26													25.86	25.54	25.30	25.06	24.83	24.61
27												27.03	26.86	26.52	26.27	26.03	25.79	25.56
28											28.30	28.03	27.85	27.50	27.25	26.99	26.75	26.50
29										29.60	29.31	29.03	28.85	28.48	28.22	27.96	27.70	27.45
30									30.93	30.62	30.32	30.03	29.84	29.47	29.19	28.92	28.66	28.40
31								32.28	31.96	31.64	31.34	31.03	30.84	30.45	30.16	29.89	29.61	29.34
32							33.65	33.32	32.99	32.66	32.35	32.04	31.83	31.43	31.14	30.85	30.57	30.29
33						35.06	34.71	34.36	34.02	33.68	33.36	33.04	32.83	32.41	32.11	31.81	31.52	31.23
34					36.49	36.12	35.76	35.40	35.05	34.71	34.37	34.04	33.82	33.40	33.08	32.78	32.48	32.18
35				37.96	37.57	37.18	36.81	36.44	36.08	35.73	35.38	35.04	34.82	34.38	34.06	33.74	33.43	33.13
36			39.45	39.04	38.64	38.25	37.86	37.48	37.11	36.75	36.39	36.04	35.81	35.36	35.03	34.71	34.39	34.07
37		40.98	40.55	40.13	39.71	39.31	38.91	38.52	38.14	37.77	37.40	37.04	36.81	36.34	36.00	35.67	35.34	35.02
38	42.54	42.09	41.65	41.21	40.79	40.37	39.96	39.56	39.17	38.79	38.41	38.04	37.80	37.32	36.98	36.63	36.30	35.97
39	43.66	43.20	42.74	42.30	41.86	41.43	41.02	40.61	40.20	39.81	39.42	39.04	38.79	38.31	37.95	37.60	37.25	36.91
40	44.78	44.30	43.84	43.38	42.93	42.50	42.07	41.65	41.23	40.83	40.43	40.04	39.79	39.29	38.92	38.56	38.21	37.86
41	45.90	45.41	44.93	44.47	44.01	43.56	43.12	42.69	42.26	41.85	41.44	41.05	40.78	40.27	39.89	39.53	39.16	38.81
42	47.02	46.52	46.03	45.55	45.08	44.62	44.17	43.73	43.30	42.87	42.45	42.05	41.78	41.25	40.87	40.49	40.12	
43	48.14	47.63	47.13	46.64	46.15	45.68	45.22	44.77	44.33	43.89	43.47	43.05	42.77	42.24	41.84	41.45		
44	49.26	48.74	48.22	47.72	47.23	46.75	46.27	45.81	45.36	44.91	44.48	44.05	43.77	43.22	42.81			
45	50.38	49.84	49.32	48.80	48.30	47.81	47.33	46.85	46.39	45.93	45.49	45.05	44.76	44.20				
46	51.50	50.95	50.41	49.89	49.37	48.87	48.38	47.89	47.42	46.95	46.50	46.05	45.76					
47	52.62	52.06	51.51	50.97	50.45	49.93	49.43	48.93	48.45	47.97	47.51	47.05						
48	53.74	53.17	52.61	52.06	51.52	51.00	50.48	49.98	49.48	49.00	48.52							
49	54.86	54.27	53.70	53.14	52.59	52.06	51.53	51.02	50.51	50.02								
50	55.98	55.38	54.80	54.23	53.67	53.12	52.58	52.06	51.54									
51	57.10	56.49	55.89	55.31	54.74	54.18	53.64	53.10										
52	58.22	57.60	56.99	56.40	55.81	55.25	54.69											
53	59.33	58.70	58.09	57.48	56.89	56.31												

Foam Tire Rollout Chart (81T 48 Pitch)

Tire Diameter

Pinion Gear	53	54	55	56	57	58	59	60	61	62	63
16	17.302	17.628	17.955	18.281	18.607	18.934	19.26	19.587	19.913	20.24	20.566
17	18.383	18.73	19.077	19.424	19.77	20.117	20.464	20.811	21.158	21.505	21.851
18	19.464	19.832	20.199	20.566	20.933	21.301	21.668	22.035	22.402	22.77	23.137
19	20.546	20.933	21.321	21.709	22.096	22.484	22.872	23.259	23.647	24.035	24.422
20	21.627	22.035	22.443	22.851	23.259	23.667	24.075	24.483	24.891	25.3	25.708
21	22.708	23.137	23.565	23.994	24.422	24.851	25.279	25.708	26.136	26.565	26.993
22	23.79	24.239	24.687	25.136	25.585	26.034	26.483	26.932	27.381	27.829	28.278
23	24.871	25.34	25.81	26.279	26.748	27.217	27.687	28.156	28.625	29.094	29.564
24	25.952	26.442	26.932	27.421	27.911	28.401	28.89	29.38	29.87	30.359	30.849
25	27.034	27.544	28.054	28.564	29.074	29.584	30.094	30.604	31.114	31.624	32.135
26	28.115	28.646	29.176	29.707	30.237	30.768	31.298	31.828	32.359	32.889	33.42
27	29.196	29.747	30.298	30.849	31.4	31.951	32.502	33.053	33.604	34.154	34.705
28	30.278	30.849	31.42	31.992	32.563	33.134	33.706	34.277	34.848	35.419	35.991
29	31.359	31.951	32.543	33.134	33.726	34.318	34.909	35.501	36.093	36.684	37.276
30	32.441	33.053	33.665	34.277	34.889	35.501	36.113	36.725	37.337	37.949	38.561
31	33.522	34.154	34.787	35.419	36.052	36.684	37.317	37.949	38.582	39.214	39.847
32	34.603	35.256	35.909	36.562	37.215	37.868	38.521	39.173	39.826	40.479	41.132
33	35.685	36.358	37.031	37.704	38.378	39.051	39.724	40.398	41.071	41.744	42.418
34	36.766	37.46	38.153	38.847	39.541	40.234	40.928	41.622	42.316	43.009	43.703
35	37.847	38.561	39.276	39.99	40.704	41.418	42.132	42.846	43.56	44.274	44.988
36	38.929	39.663	40.398	41.132	41.867	42.601	43.336	44.07	44.805	45.539	46.274
37	40.01	40.765	41.52	42.275	43.03	43.785	44.539	45.294	46.049	46.804	47.559
38	41.091	41.867	42.642	43.417	44.193	44.968	45.743	46.519	47.294	48.069	48.844
39	42.173	42.968	43.764	44.56	45.356	46.151	46.947	47.743	48.538	49.334	50.13
40	43.254	44.07	44.886	45.702	46.519	47.335	48.151	48.967	49.783	50.599	51.415

Foam Tire Rollout Chart (110T 64 Pitch)

Tire Diameter

Pinion Gear	53	54	55	56	57	58	59	60	61	62	63
21	16.722	17.037	17.353	17.668	17.984	18.299	18.615	18.93	19.246	19.561	19.877
22	17.518	17.848	18.179	18.509	18.84	19.171	19.501	19.832	20.162	20.493	20.823
23	18.314	18.66	19.005	19.351	19.696	20.042	20.387	20.733	21.079	21.424	21.77
24	19.11	19.471	19.832	20.192	20.553	20.913	21.274	21.634	21.995	22.356	22.716
25	19.907	20.282	20.658	21.033	21.409	21.785	22.16	22.536	22.911	23.287	23.663
26	20.703	21.094	21.484	21.875	22.265	22.656	23.047	23.437	23.828	24.219	24.609
27	21.499	21.905	22.311	22.716	23.122	23.527	23.933	24.339	24.744	25.15	25.556
28	22.296	22.716	23.137	23.558	23.978	24.399	24.82	25.24	25.661	26.082	26.502
29	23.092	23.527	23.963	24.399	24.835	25.27	25.706	26.142	26.577	27.013	27.449
30	23.888	24.339	24.789	25.24	25.691	26.142	26.592	27.043	27.494	27.944	28.395
31	24.684	25.15	25.616	26.082	26.547	27.013	27.479	27.944	28.41	28.876	29.342
32	25.481	25.961	26.442	26.923	27.404	27.884	28.365	28.846	29.327	29.807	30.288
33	26.277	26.773	27.268	27.764	28.26	28.756	29.252	29.747	30.243	30.739	31.235
34	27.073	27.584	28.095	28.606	29.116	29.627	30.138	30.649	31.16	31.67	32.181
35	27.869	28.395	28.921	29.447	29.973	30.499	31.024	31.55	32.076	32.602	33.128
36	28.666	29.207	29.747	30.288	30.829	31.37	31.911	32.452	32.993	33.533	34.074
37	29.462	30.018	30.574	31.13	31.685	32.241	32.797	33.353	33.909	34.465	35.021
38	30.258	30.829	31.4	31.971	32.542	33.113	33.684	34.255	34.825	35.396	35.967
39	31.054	31.64	32.226	32.812	33.398	33.984	34.57	35.156	35.742	36.328	36.914
40	31.851	32.452	33.053	33.654	34.255	34.856	35.456	36.057	36.658	37.259	37.86
41	32.647	33.263	33.879	34.495	35.111	35.727	36.343	36.959	37.575	38.191	38.807
42	33.443	34.074	34.705	35.336	35.967	36.598	37.229	37.86	38.491	39.122	39.753
43	34.24	34.886	35.532	36.178	36.824	37.47	38.116	38.762	39.408	40.054	40.7
44	35.036	35.697	36.358	37.019	37.68	38.341	39.002	39.663	40.324	40.985	41.646
45	35.832	36.508	37.184	37.86	38.536	39.212	39.889	40.565	41.241	41.917	42.593
46	36.628	37.319	38.011	38.702	39.393	40.084	40.775	41.466	42.157	42.848	43.539
47	37.425	38.131	38.837	39.543	40.249	40.955	41.661	42.367	43.074	43.78	44.486
48	38.221	38.942	39.663	40.384	41.105	41.827	42.548	43.269	43.99	44.711	45.432
49	39.017	39.753	40.489	41.226	41.962	42.698	43.434	44.17	44.907	45.643	46.379
50	39.813	40.565	41.316	42.067	42.818	43.569	44.321	45.072	45.823	46.574	47.325
51	40.61	41.376	42.142	42.908	43.675	44.441	45.207	45.973	46.739	47.506	48.272
52	41.406	42.187	42.968	43.75	44.531	45.312	46.093	46.875	47.656	48.437	49.218
53	42.202	42.998	43.795	44.591	45.387	46.184	46.98	47.776	48.572	49.369	50.165