

Conversion Factors

Selected Conversion Factors

	Given Quantity	Multiply By	To Obtain	
Length	Centimeter	0.0328084	Foot	
	Centimeter	0.3937008	Inch	
	Foot	0.3048	Meter	
	Inch	25.4	Millimeter	
	Meter	3.28084	Foot	
Volume	Millimeter	0.03937008	Inch	
	Centimeter ³	0.06102376	Inch ³	
	Foot ³	28.31685	Liter	
	Inch ³	16,387.06	Milliliter	
	Liter	0.03531466	Foot ³	
	Liter	0.264172	Gallon	
	Quart	0.946	Liter	
	Velocity	Centimeter/second	1.968504	Foot/minute
		Centimeter/second	0.328084	Foot/second
		Centimeter/minute	0.3937008	Inch/minute
Foot/minute		0.3048	Meter/minute	
Foot/second		0.3048	Meter/second	
Inch/minute		25.4	Millimeter/minute	
Mile/hour		1.609344	Kilometer/hour	
Meter/minute		3.28084	Foot/minute	
Meter/second		196.8504	Foot/minute	
Meter/second		3.28084	Foot/second	
Millimeter/minute		0.03937008	Inch/minute	
Mass		Gram	0.03527397	Ounce
		Kilogram	35.27397	Ounce
	Kilogram	2.204622	Pound	
	Kilogram/meter ³	0.06242797	Pound/foot ³	
	Ounce	28.34952	Gram	
	Ounce	0.02834952	Kilogram	
	Pound	0.4535924	Kilogram	
	Pound/foot ³	16.01846	Kilogram/meter ³	
	Force	Newton	0.2248089	Pound-force
Newton		0.1019716	Kilogram-force	
Newton/meter		0.005710148	Pound/inch	
Newton/meter		0.06852178	Pound/foot	
Pound/inch		175.1268	Newton/meter	
Pound/foot		14.5939	Newton/meter	
Momentum	Kilogram-meter/second	7.233011	Pound-foot/second	
	Kilogram-meter/second	86.79614	Pound-inch/second	
	Pound-foot/second	0.138255	Kilogram-meter/second	
	Pound-inch/second	0.01152125	Kilogram-meter/second	
Pressure	Kilogram/centimeter ²	14.22334	Pound/inch ²	
	Kilogram/meter ²	0.2048161	Pound/foot ²	
	Kilogram/meter ²	9.80665	Newton/meter ²	
	Newton/millimeter ²	145.0377	Pound/inch ²	
	Newton/meter ²	0.1019716	Kilogram/meter ²	
	Pound/inch ²	0.07030697	Kilogram/centimeter ²	
	Pound/foot ²	4.882429	Kilogram/meter ²	
	Pound/inch ²	0.006894757	Newton/millimeter ²	
Power	Foot-pound/minute	0.02256967	Watt	
	Horsepower	0.7456999	Kilowatt	
	Horsepower	745.6999	Watt	
	Kilowatt	1.341022	Horsepower	
	Watt	0.001341022	Horsepower	
	Watt	44.25372	Foot-pound/minute	
Temp.	Celsius	9 (then /5 and + 32)	Fahrenheit	
	Fahrenheit	(first -32, then /9) x 5	Celsius	

Chain Length in Feet Converted from Pitches

Pitches	Chain Pitch (inches)												
	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	3.00
1	0.021	0.031	0.042	0.052	0.063	0.083	0.104	0.125	0.146	0.167	0.188	0.208	0.250
2	0.042	0.063	0.083	0.104	0.125	0.167	0.208	0.250	0.292	0.333	0.375	0.417	0.500
3	0.063	0.094	0.125	0.156	0.188	0.250	0.313	0.375	0.438	0.500	0.563	0.625	0.750
4	0.083	0.125	0.167	0.208	0.250	0.333	0.417	0.500	0.583	0.667	0.750	0.833	1.000
5	0.104	0.156	0.208	0.260	0.313	0.417	0.521	0.625	0.729	0.833	0.938	1.042	1.250
6	0.125	0.188	0.250	0.313	0.375	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.500
7	0.146	0.219	0.292	0.365	0.438	0.583	0.729	0.875	1.021	1.167	1.313	1.458	1.750
8	0.167	0.250	0.333	0.417	0.500	0.667	0.833	1.000	1.167	1.333	1.500	1.667	2.000
9	0.188	0.281	0.375	0.469	0.563	0.750	0.938	1.125	1.313	1.500	1.688	1.875	2.250
10	0.208	0.313	0.417	0.521	0.625	0.833	1.042	1.250	1.458	1.667	1.875	2.083	2.500
11	0.229	0.344	0.458	0.573	0.688	0.917	1.146	1.375	1.604	1.833	2.063	2.292	2.750
12	0.250	0.375	0.500	0.625	0.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	3.000
13	0.271	0.406	0.542	0.677	0.813	1.083	1.354	1.625	1.896	2.167	2.438	2.708	3.250
14	0.292	0.438	0.583	0.729	0.875	1.167	1.458	1.750	2.042	2.333	2.625	2.917	3.500
15	0.313	0.469	0.625	0.781	0.938	1.250	1.563	1.875	2.188	2.500	2.813	3.125	3.750
16	0.333	0.500	0.667	0.833	1.000	1.333	1.667	2.000	2.333	2.667	3.000	3.333	4.000
17	0.354	0.531	0.708	0.885	1.063	1.417	1.771	2.125	2.479	2.833	3.188	3.542	4.250
18	0.375	0.563	0.750	0.938	1.025	1.500	1.875	2.250	2.625	3.000	3.375	3.750	4.500
19	0.396	0.594	0.792	0.990	1.188	1.583	1.979	2.375	2.771	3.167	3.563	3.958	4.750
20	0.417	0.625	0.833	1.042	1.250	1.667	2.083	2.500	2.917	3.333	3.750	4.167	5.000
21	0.438	0.656	0.875	1.094	1.313	1.750	2.188	2.625	3.063	3.500	3.938	4.375	5.250
22	0.458	0.688	0.917	1.146	1.375	1.833	2.292	2.750	3.208	3.667	4.125	4.583	5.500
23	0.479	0.719	0.958	1.198	1.438	1.917	2.396	2.875	3.354	3.833	4.313	4.792	5.750
24	0.500	0.750	1.000	1.250	1.500	2.000	2.500	3.000	3.500	4.000	4.500	5.000	6.000
25	0.521	0.781	1.042	1.302	1.563	2.083	2.604	3.125	3.646	4.167	4.688	5.208	6.250
26	0.542	0.813	1.083	1.354	1.625	2.167	2.708	3.250	3.792	4.333	4.875	5.417	6.500
27	0.563	0.844	1.125	1.406	1.688	2.250	2.813	3.375	3.938	4.500	5.063	5.625	6.750
28	0.583	0.875	1.167	1.458	1.750	2.333	2.917	3.500	4.083	4.667	5.250	5.833	7.000
29	0.604	0.906	1.208	1.510	1.813	2.417	3.021	3.625	4.229	4.833	5.438	6.042	7.250
30	0.625	0.938	1.250	1.563	1.875	2.500	3.125	3.750	4.375	5.000	5.625	6.250	7.500
31	0.646	0.969	1.292	1.615	1.938	2.583	3.229	3.875	4.521	5.167	5.813	6.458	7.750
32	0.667	1.000	1.333	1.667	2.000	2.667	3.333	4.000	4.667	5.333	6.000	6.667	8.000
33	0.688	1.031	1.375	1.719	2.063	2.750	3.438	4.125	4.813	5.500	6.188	6.875	8.250
34	0.708	1.063	1.417	1.771	2.125	2.833	3.542	4.250	4.958	5.667	6.375	7.083	8.500
35	0.729	1.094	1.458	1.823	2.188	2.917	3.646	4.375	5.104	5.833	6.563	7.292	8.750

Chain Length in Feet Converted from Pitches

Pitches	Chain Pitch (inches)												
	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	3.00
36	0.750	1.125	1.500	1.875	2.250	3.000	3.750	4.500	5.250	6.000	6.750	7.500	9.000
37	0.771	1.156	1.542	1.927	2.313	3.083	3.854	4.625	5.396	6.167	6.938	7.708	9.250
38	0.792	1.188	1.583	1.979	2.375	3.167	3.958	4.750	5.542	6.333	7.125	7.917	9.500
39	0.813	1.219	1.625	2.031	2.438	3.250	4.063	4.875	5.688	6.500	7.313	8.125	9.750
40	0.833	1.250	1.667	2.083	2.500	3.333	4.167	5.000	5.833	6.667	7.500	8.333	10.000
41	0.854	1.281	1.708	2.135	2.563	3.417	4.271	5.125	5.979	6.833	7.688	8.542	10.250
42	0.875	1.313	1.750	2.188	2.625	3.500	4.375	5.250	6.125	7.000	7.875	8.750	10.500
43	0.896	1.344	1.792	2.240	2.688	3.583	4.479	5.375	6.271	7.167	8.063	8.958	10.750
44	0.917	1.375	1.833	2.292	2.750	3.667	4.583	5.500	6.417	7.333	8.250	9.167	11.000
45	0.938	1.406	1.875	2.344	2.813	3.750	4.688	5.625	6.563	7.500	8.438	9.375	11.250
46	0.958	1.438	1.917	2.396	2.875	3.833	4.792	5.750	6.708	7.667	8.625	9.583	11.500
47	0.979	1.469	1.958	2.448	2.938	3.917	4.896	5.875	6.854	7.833	8.813	9.792	11.750
48	1.000	1.500	2.000	2.500	3.000	4.000	5.000	6.000	7.000	8.000	9.000	10.000	12.000
49	1.021	1.531	2.042	2.552	3.063	4.083	5.104	6.125	7.146	8.167	9.188	10.208	12.250
50	1.042	1.563	2.083	2.604	3.125	4.167	5.208	6.250	7.292	8.333	9.375	10.417	12.500
51	1.063	1.594	2.125	2.656	3.188	4.250	5.313	6.375	7.438	8.500	9.563	10.625	12.750
52	1.083	1.625	2.167	2.708	3.250	4.333	5.417	6.500	7.583	8.667	9.750	10.833	13.000
53	1.104	1.656	2.208	2.760	3.313	4.417	5.521	6.625	7.729	8.833	9.938	11.042	13.250
54	1.125	1.688	2.250	2.813	3.375	4.500	5.625	6.750	7.875	9.000	10.125	11.250	13.500
55	1.146	1.719	2.292	2.865	3.438	4.583	5.729	6.875	8.021	9.167	10.313	11.458	13.750
56	1.167	1.750	2.333	2.917	3.500	4.667	5.833	7.000	8.167	9.333	10.500	11.667	14.000
57	1.188	1.781	2.375	2.969	3.563	4.750	5.938	7.125	8.313	9.500	10.688	11.875	14.250
58	1.208	1.813	2.417	3.021	3.625	4.833	6.042	7.250	8.458	9.667	10.875	12.083	14.500
59	1.229	1.844	2.458	3.073	3.688	4.917	6.146	7.375	8.604	9.833	11.063	12.292	14.750
60	1.250	1.875	2.500	3.125	3.750	5.000	6.250	7.500	8.750	10.000	11.250	12.500	15.000
61	1.271	1.906	2.542	3.177	3.813	5.083	6.354	7.625	8.896	10.167	11.438	12.708	15.250
62	1.292	1.938	2.583	3.229	3.875	5.167	6.458	7.750	9.042	10.333	11.625	12.917	15.500
63	1.313	1.969	2.625	3.281	3.938	5.250	6.563	7.875	9.188	10.500	11.813	13.125	15.750
64	1.333	2.000	2.667	3.333	4.000	5.333	6.667	8.000	9.333	10.667	12.000	13.333	16.000
65	1.354	2.031	2.708	3.385	4.063	5.417	6.771	8.125	9.479	10.833	12.188	13.542	16.250
66	1.375	2.063	2.750	3.438	4.125	5.500	6.875	8.250	9.625	11.000	12.375	13.750	16.500
67	1.396	2.094	2.792	3.490	4.188	5.583	6.979	8.375	9.771	11.167	12.563	13.958	16.750
68	1.417	2.125	2.833	3.542	4.250	5.667	7.083	8.500	9.917	11.333	12.750	14.167	17.000
69	1.438	2.156	2.875	3.594	4.313	5.750	7.188	8.625	10.063	11.500	12.938	14.375	17.250
70	1.458	2.188	2.917	3.646	4.375	5.833	7.292	8.750	10.208	11.667	13.125	14.583	17.500

Chain Length in Feet Converted from Pitches

Pitches	Chain Pitch (inches)												
	0.25	0.375	0.50	0.625	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	3.00
71	1.479	2.219	2.958	3.698	4.438	5.917	7.396	8.875	10.354	11.833	13.313	14.792	17.750
72	1.500	2.250	3.000	3.750	4.500	6.000	7.500	9.000	10.500	12.000	13.500	15.000	18.000
73	1.521	2.281	3.042	3.802	4.563	6.083	7.604	9.125	10.646	12.167	13.688	15.208	18.250
74	1.542	2.313	3.083	3.854	4.625	6.167	7.708	9.250	10.792	12.333	13.875	15.417	18.500
75	1.563	2.344	3.125	3.906	4.688	6.250	7.813	9.375	10.938	12.500	14.063	15.625	18.750
76	1.583	2.375	3.167	3.958	4.750	6.333	7.917	9.500	11.083	12.667	14.250	15.833	19.000
77	1.604	2.406	3.208	4.010	4.813	6.417	8.021	9.625	11.229	12.833	14.438	16.042	19.250
78	1.625	2.438	3.250	4.063	4.875	6.500	8.125	9.750	11.375	13.000	14.625	16.250	19.500
79	1.646	2.469	3.292	4.115	4.938	6.583	8.229	9.875	11.521	13.167	14.813	16.458	19.750
80	1.667	2.500	3.333	4.167	5.000	6.667	8.333	10.000	11.667	13.333	15.000	16.667	20.000
81	1.688	2.531	3.375	4.219	5.063	6.750	8.438	10.125	11.813	13.500	15.188	16.875	20.250
82	1.708	2.563	3.417	4.271	5.125	6.833	8.542	10.250	11.958	13.667	15.375	17.083	20.500
83	1.729	2.594	3.458	4.323	5.188	6.917	8.646	10.375	12.104	13.833	15.563	17.292	20.750
84	1.750	2.625	3.500	4.375	5.250	7.000	8.750	10.500	12.250	14.000	15.750	17.500	21.000
85	1.771	2.656	3.542	4.427	5.313	7.083	8.854	10.625	12.396	14.167	15.938	17.708	21.250
86	1.792	2.688	3.583	4.479	5.375	7.167	8.958	10.750	12.542	14.333	16.125	17.917	21.500
87	1.813	2.719	3.625	4.531	5.438	7.250	9.063	10.875	12.688	14.500	16.313	18.125	21.750
88	1.833	2.750	3.667	4.583	5.500	7.333	9.167	11.000	12.833	14.667	16.500	18.333	22.000
89	1.854	2.781	3.708	4.635	5.563	7.417	9.271	11.125	12.979	14.833	16.688	18.542	22.250
90	1.875	2.813	3.750	4.688	5.625	7.500	9.375	11.250	13.125	15.000	16.875	18.750	22.500
91	1.896	2.844	3.792	4.740	5.688	7.583	9.479	11.375	13.271	15.167	17.063	18.958	22.750
92	1.917	2.875	3.833	4.792	5.750	7.667	9.583	11.500	13.417	15.333	17.250	19.167	23.000
93	1.938	2.906	3.875	4.844	5.813	7.750	9.688	11.625	13.563	15.500	17.438	19.375	23.250
94	1.958	2.938	3.917	4.896	5.875	7.833	9.792	11.750	13.708	15.667	17.625	19.583	23.500
95	1.979	2.969	3.958	4.948	5.938	7.917	9.896	11.875	13.854	15.833	17.813	19.792	23.750
96	2.000	3.000	4.000	5.000	6.000	8.000	10.000	12.000	14.000	16.000	18.000	20.000	24.000
97	2.021	3.031	4.042	5.052	6.063	8.083	10.104	12.125	14.146	16.167	18.188	20.208	24.250
98	2.042	3.063	4.083	5.104	6.125	8.167	10.208	12.250	14.292	16.333	18.375	20.417	24.500
99	2.063	3.094	4.125	5.156	6.188	8.250	10.313	12.375	14.438	16.500	18.563	20.625	24.750
100	2.083	3.125	4.167	5.208	6.250	8.333	10.417	12.500	14.583	16.667	18.750	20.833	25.000