

Power and Voltage Ratios Conversion



GIVEN : Decibels	CONVERSION TABLE POWER AND VOLTAGE RATIO TO DB	TO FIND: Power and { Voltage Current } Ratios
TO ACCOUNT FOR THE SIGN OF THE DECIBEL		
For positive (+) values of the decibel - Both voltage and power ratios are greater than unity. Use the two right-hand columns.		For negative (-) values of the decibel - Both voltage and power ratios are less than unity. Use the two left-hand columns.

Example: ± Given 9.1dB; Find:

	Power Ratio	Voltage Ratio
+ 9.1 dB	8.128	2.851
- 9.1 dB	0.1230	0.3508

← -dB+ →

← -dB+ →

Voltage Ratio	Power Ratio	dB	Voltage Ratio	Power Ratio
1.0000	1.0000	0.0	1.000	1.000
0.9886	0.9772	0.1	1.012	1.023
0.9772	0.9550	0.2	1.023	1.047
0.9661	0.9333	0.3	1.035	1.072
0.9550	0.9120	0.4	1.047	1.096
0.9441	0.8913	0.5	1.059	1.122
0.9333	0.8710	0.6	1.072	1.148
0.9226	0.8511	0.7	1.084	1.175
0.9120	0.8318	0.8	1.096	1.202
0.9016	0.8128	0.9	1.109	1.230
0.8913	0.7943	1.0	1.122	1.259
0.8810	0.7762	1.1	1.135	1.288
0.8710	0.7586	1.2	1.148	1.318
0.8610	0.7413	1.3	1.161	1.349
0.8511	0.7244	1.4	1.175	1.380
0.8414	0.7079	1.5	1.189	1.413
0.8318	0.6918	1.6	1.202	1.445
0.8222	0.6761	1.7	1.216	1.479
0.8128	0.6607	1.8	1.230	1.514
0.8035	0.6457	1.9	1.245	1.549
0.7943	0.6319	2.0	1.259	1.585
0.7852	0.6166	2.1	1.274	1.622
0.7762	0.6026	2.2	1.288	1.660
0.7674	0.5888	2.3	1.303	1.698
0.7586	0.5754	2.4	1.318	1.738
0.7499	0.5623	2.5	1.334	1.778
0.7413	0.5495	2.6	1.349	1.820
0.7328	0.5370	2.7	1.365	1.862
0.7244	0.5248	2.8	1.381	1.905
0.7161	0.5129	2.9	1.396	1.950
0.7079	0.5012	3.0	1.413	1.995
0.6998	0.4808	3.1	1.429	2.042
0.6918	0.4786	3.2	1.445	2.089
0.6839	0.4677	3.3	1.462	2.138
0.6761	0.4571	3.4	1.479	2.188
0.6683	0.4467	3.5	1.496	2.239
0.6607	0.4365	3.6	1.514	2.291
0.6531	0.4266	3.7	1.531	2.344
0.6457	0.4169	3.8	1.549	2.399
0.6383	0.4074	3.9	1.567	2.455
0.6310	0.3981	4.0	1.585	2.512
0.6237	0.3890	4.1	1.603	2.570
0.6166	0.3802	4.2	1.622	2.630
0.6095	0.3715	4.3	1.641	2.692
0.6026	0.3631	4.4	1.660	2.754
0.5957	0.3548	4.5	1.679	2.818
0.5888	0.3467	4.6	1.698	2.884
0.5821	0.3388	4.7	1.718	2.951
0.5754	0.3311	4.8	1.738	3.020
0.5689	0.3236	4.9	1.758	3.090

Voltage Ratio	Power Ratio	dB	Voltage Ratio	Power Ratio
0.5623	0.3162	5.0	1.778	3.162
0.5559	0.3090	5.1	1.799	3.236
0.5495	0.3020	5.2	1.820	3.311
0.5433	0.2951	5.3	1.841	3.388
0.5370	0.2884	5.4	1.862	3.467
0.5309	0.2818	5.5	1.884	3.548
0.5248	0.2754	5.6	1.905	3.631
0.5188	0.2692	5.7	1.928	3.715
0.5129	0.2630	5.8	1.950	3.802
0.5070	0.2570	5.9	1.972	3.890
0.5012	0.2512	6.0	1.995	3.981
0.4955	0.2455	6.1	2.018	4.074
0.4898	0.2399	6.2	2.042	4.169
0.4842	0.2344	6.3	2.065	4.266
0.4786	0.2291	6.4	2.089	4.365
0.4732	0.2239	6.5	2.113	4.467
0.4677	0.2188	6.6	2.138	4.571
0.4624	0.2138	6.7	2.163	4.677
0.4571	0.2089	6.8	2.188	4.786
0.4519	0.2042	6.9	2.213	4.898
0.4467	0.1995	7.0	2.239	5.012
0.4416	0.1950	7.1	2.265	5.129
0.4365	0.1905	7.2	2.291	5.248
0.4315	0.1862	7.3	2.317	5.370
0.4266	0.1820	7.4	2.344	5.495
0.4217	0.1778	7.5	2.371	5.623
0.4169	0.1738	7.6	2.399	5.754
0.4121	0.1698	7.7	2.427	5.888
0.4074	0.1660	7.8	2.455	6.026
0.4027	0.1622	7.9	2.483	6.166
0.3981	0.1585	8.0	2.512	6.310
0.3936	0.1549	8.1	2.541	6.457
0.3890	0.1514	8.2	2.570	6.607
0.3846	0.1479	8.3	2.600	6.761
0.3802	0.1445	8.4	2.630	6.918
0.3758	0.1413	8.5	2.661	7.079
0.3715	0.1380	8.6	2.692	7.244
0.3673	0.1349	8.7	2.723	7.413
0.3631	0.1318	8.8	2.754	7.586
0.3589	0.1288	8.9	2.786	7.762
0.3548	0.1259	9.0	2.818	7.943
0.3508	0.1230	9.1	2.851	8.128
0.3467	0.1202	9.2	2.884	8.318
0.3428	0.1175	9.3	2.917	8.511
0.3388	0.1148	9.4	2.951	8.710
0.3350	0.1122	9.5	2.985	8.913
0.3311	0.1096	9.6	3.020	9.120
0.3273	0.1072	9.7	3.055	9.333
0.3236	0.1047	9.8	3.090	9.550
0.3199	0.1023	9.9	3.126	9.772