

Tuning of the Harmonic Series

Steven M. Miller

Harmonic Number	Frequency in Hertz	Adjacent Ratio	Cents	Adjacent Interval	Deviation from 12-tet	Absolute Ratio	Cents	Absolute Interval	Deviation from 12-tet
32	14080	32/31	54.96	sup. 1/4 tone	-45.04	32/16	1200.00	Octave	0.00
31	13640	31/30	56.77	inf. 1/4 tone	-43.23	31/16	1145.04	large M7th	45.04
30	13200	30/29	58.69		-41.31	30/16	1088.27	M7th	-11.73
29	12760	29/28	60.75		-39.25	29/16	1029.58	large m7th	29.58
28	12320	28/27	62.96		-37.04	28/16	968.83	sept. m7th	-31.17
27	11880	27/26	65.34		-34.66	27/16	905.87	M6th	5.87
26	11440	26/25	67.90		-32.10	26/16	840.53	large m6th	40.53
25	11000	25/24	70.67	small m2nd	-29.33	25/16	772.63	small m6th	-27.37
24	10560	24/23	73.68		-26.32	24/16	701.96	5th	1.96
23	10120	23/22	76.96		-23.04	23/16	628.27	large Tritone	28.27
22	9680	22/21	80.54		-19.46	22/16	551.32	und. Tritone	-48.68
21	9240	21/20	84.47		-15.53	21/16	470.78	sept. 4th	-29.22
20	8800	20/19	88.80		-11.20	20/16	386.31	M3rd	-13.69
19	8360	19/18	93.60		-6.40	19/16	297.51	m3rd	-2.49
18	7920	18/17	98.95		-1.05	18/16	203.91	M2nd	3.91
17	7480	17/16	104.96	over. m2nd	4.96	17/16	104.96	m2nd	4.96
16	7040	16/15	111.73	large m2nd	11.73	16/8	1200.00	Octave	0.00
15	6600	15/14	119.44		19.44	15/8	1088.27	M7th	-11.73
14	6160	14/13	128.30		28.30	14/8	968.83	sept. m7th	-31.17
13	5720	13/12	138.57		38.57	13/8	840.53	large m6th	40.53
12	5280	12/11	150.64		-49.36	12/8	701.96	5th	1.96
11	4840	11/10	165.00		-35.00	11/8	551.32	und. Tritone	-48.68
10	4400	10/9	182.40	small M2nd	-17.60	10/8	386.31	M3rd	-13.69
9	3960	9/8	203.91	large M2nd	3.91	9/8	203.91	9th-M2nd	3.91
8	3520	8/7	231.17	sept. M2nd	31.17	8/4	1200.00	Octave	0.00
7	3080	7/6	266.87	sept. m3rd	-33.13	7/4	968.83	sept. m7th	-31.17
6	2640	6/5	315.64	m3rd	15.64	6/4	701.96	5th	1.96
5	2200	5/4	386.31	M3rd	-13.69	5/4	386.31	M3rd	-13.69
4	1760	4/3	498.04	4th	-1.96	4/2	1200.00	Octave	0.00
3	1320	3/2	701.96	5th	1.96	3/2	701.96	5th	1.96
2	880	2/1	1200.00	Octave	0.00	2/1	1200.00	Octave	0.00
1	440	1/1	0.00	Unison	0.00	1/1	0.00	Unison	0.00