

Examples of the Overtone Series

The Harmonic Series- based on a C Fundamental Harmonic

R(1) R(1) 5 R(1) 3 5 b7 R(1) 2(9) 3 #4(#11) 5 6(13) b7 7 R(1)

- 1/7: 2 octaves + minor 7th higher
- 1/6: 2 octaves + fifth higher
- 1/5: 2 octaves + major third higher
- 1/4: Two octaves higher
- 1/3: One octave + fifth higher
- 1/2: One octave higher
- 1: Fundamental pitch

The Overtone Series (Harmonics)

Frequency	Multiple	Name	Pitch
65 Hz	1x	Fundamental	C1 (Base pitch)
130 Hz	2x	First Harmonic	C2 (1 octave higher)
195 Hz	3x	Second Harmonic	G2 (octave + fifth higher)
260 Hz	4x	Third Harmonic	C3 (2 octaves higher)
325 Hz	5x	Fourth Harmonic	E3 (2 octaves + maj 3rd higher)
390 Hz	6x	Fifth Harmonic	G3 (2 octaves + fifth higher)
455 Hz	7x	Sixth Harmonic	Bb3 (2 octaves + minor seventh higher... though it will be slightly out of tune)
520 Hz	8x	Seventh Harmonic	C4 (3 octaves higher)
585 Hz	9x	Eighth Harmonic	D4 (3 octaves + major 2nd)
And so on...			

octave ↓ perfect fourth ↓ minor third ↓ supermajor second ↓ "lesser tone" ↓ lesser undecimal neutral second ↓ lesser tridecimal 2/3-tone ↓ just diatonic semitone ↓

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

perfect ↑ fifth major ↑ third subminor ↑ third "greater ↑ tone" greater ↑ undecimal neutral second greater ↑ tridecimal 2/3-tone septimal ↑ diatonic semitone