Intervals

An interval is the distance between 2 notes, the first one being used as a reference point. This interval is defined by a name, designating the number of notes covered by the interval, and by a qualifier, designating the quality of the interval, i.e. its size in number of tone.

Single and compound intervals table

Name	Quality	Interval notation	Tone number	Higher degree notation
SECOND (2nd)	minor	m2	0,5	♭2
	major	M2	1	2
	augmented	A2	1,5	♯2
THIRD (3rd)	minor	m3	1,5	♭3
	major	M3	2	3
FOURTH (4th)	diminished	d4	2	♭4
	perfect	P4	2,5	4
	augmented	A4	3	♯4
FIFTH (5th)	diminished	d5	3	♭5
	perfect	P5	3,5	5
	augmented	A5	4	♯5
SIXTH (6th)	minor	m6	4	♭6
	major	M6	4,5	6
SEVENTH (7th)	diminished	d7	4,5	♭♭7
	minor	m7	5	♭7
	major	M7	5,5	7
OCTAVE (8ve)	perfect	P8	6	8
NINTH (9th)	minor	m9	6,5	♭9
	major	M9	7	9
	augmented	A9	7,5	♯9
ELEVENTH (11th)	perfect	P11	8,5	11
	augmented	A11	9	♯11
THIRTEENTH (13th)	minor	m13	10	♭13
	major	M13	10,5	13

In summary, the diminished, perfect and augmented qualities, apply rather to the 4th and 5th. The minor and major qualities apply to the 2nd, 3rd, 6th and 7th (which can also be diminished). The intervals of A4 and d5 are also called tritone (3 tones).

Intervals whose sum equals an octave are called complementary intervals. Raising the bass note of an interval to the upper octave reverses the interval and produces its complementary interval.

Interval complementary

Inversion   Complementary

m2 — M7   octave   0.5 + 5.5 = 6 tones
                                    m2 + M7

M2 — m7   1 + 5 = 6 tones
                                    M2 + m7

A2 — d7   1.5 + 4.5 = 6 tones
                                    A2 + d7

m3 — M6   1.5 + 4.5 = 6 tones
                                    m3 + M6

M3 — m6   2 + 4 = 6 tones
                                    M3 + m6

d4 — A5   2 + 4 = 6 tones
                                    d4 + A5

P4 — P5   2.5 + 3.5 = 6 tones
                                    P4 + P5

A4 — d5   3 + 3 = 6 tones
                                    A4 + d5

: enharmonic intervals