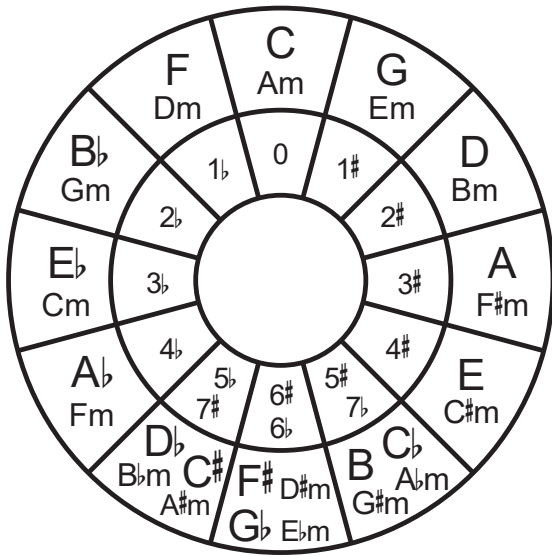


MUSIC STUDIES FORMULA SHEET



C Major
1 2 3 4 5 6 7 8 7 6 5 4 3 2 1

C Natural Minor / Aeolian Minor
1 2 b3 4 5 b6 b7 8 b7 b6 5 4 b3 2 1

C Harmonic Minor
1 2 b3 4 5 b6 7 8 7 b6 5 4 b3 2 1

C Melodic Minor
1 2 b3 4 5 6 7 8 b7 b6 5 4 b3 2 1

C Blues
1 b3 4 b5 5 b7 8 b7 5 b5 4 b3 1

C Pentatonic (major)
1 2 3 5 6 8 6 5 3 2 1

C Pentatonic (minor)
1 b3 4 5 b7 8 b7 5 4 b3 1

C Dorian (2nd mode of Bb major scale)
1 2 b3 4 5 6 b7 8 b7 6 5 4 b3 2 1

C Mixolydian (5th mode of F major scale)
1 2 3 4 5 6 b7 8 b7 6 5 4 3 2 1

Trumpet in Bb Clarinet in Bb Horn in F
written sounding written sounding written sounding

Guitar Bass guitar Soprano sax in Bb
written sounding written sounding written sounding

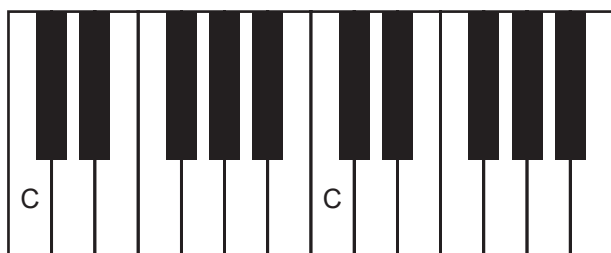
Alto sax in Eb Tenor sax in Bb Baritone sax in Eb
written sounding written sounding written sounding

Simple time			Number of beats to each bar	Compound time		
Note-value of each beat				Note-value of each beat		
			2 Duple			
$\frac{2}{2}$ C	$\frac{2}{4}$	$\frac{2}{8}$		$\frac{6}{4}$	$\frac{6}{8}$	$\frac{6}{16}$
$\frac{3}{2}$	$\frac{3}{4}$	$\frac{3}{8}$	3 Triple	$\frac{9}{4}$	$\frac{9}{8}$	$\frac{9}{16}$
$\frac{4}{2}$	$\frac{4}{4}$ C	$\frac{4}{8}$	4 Quadruple	$\frac{12}{4}$	$\frac{12}{8}$	$\frac{12}{16}$

PLEASE TURN OVER

Naming intervals by number and tonality name				
Interval	Upper pitch is two semitones lower (than the major scale of the lower tonic note)	Upper pitch is one semitone lower (than the major scale of the lower tonic note)	Upper pitch is within the major scale (of the lower tonic note)	Upper pitch is one semitone higher (than the major scale of the lower tonic note)
Unison, Octave, 4th, 5th		Diminished	Perfect	Augmented
2nd, 3rd, 6th, 7th	Diminished	Minor	Major	Augmented

Scale degree names (Roman numerals refer to major scale)		
1	Tonic	I
2	Supertonic	ii
3	Mediant	iii
4	Subdominant	IV
5	Dominant	V
6	Submediant	vi
7	Leading note	vii
8	Upper tonic	VIII



Chord name	Symbol	Root	3rd	5th	7th
Major	X	X	4st	3st	
Minor	Xm	X	3	4	
Diminished	X ^o	X	3	3	
Augmented	X ⁺	X	4	4	
Major 7	Xmaj7	X	4st	3st	4st
Dominant 7	X7	X	4	3	3
Minor 7	Xm7	X	3	4	3
Half Diminished 7 or Minor 7 \flat 5	X ^{o7} or Xm7 \flat 5	X	3	3	4
Diminished 7	X ^{o7}	X	3	3	3
Augmented 7	X ⁺⁷	X	4	4	2

st = semitone steps between two successive pitches

Diatonic 7th Chords (in C major)

Cmaj⁷ Dm⁷ Em⁷ Fmaj⁷ G⁷ Am⁷ B^o

I ii iii IV V vi vii
1 2 3 4 5 6 7

Triads and 7th Chords (built above C)

C Cm C^o C⁺ Cmaj⁷ C⁷ Cm⁷ C^{o7} C^{o7} C⁺⁷

C C/E C/G C⁷ C⁷/E C⁷/G C⁷/B \flat

Ia Ib Ic V7a V7b V7c V7d
I I⁶ I⁴ V⁷ V⁶₅ V⁴₃ V⁴₂
root 1st inversion 2nd inversion root 1st inversion 2nd inversion 3rd inversion

Basic cadences	
Perfect	5-1 (V-I)
Plagal	4-1 (IV-I)
Interrupted	5-6 (V-vi)
Imperfect	1-5 (I-V) 2-5 (ii-V) 4-5 (IV-V) 6-5 (vi-V)

Standard chord progressions	
1 4 5	1 4 7 3 6 2 5 1
1 5 6 4	1 6 2 5 1
1 4 6 5	6 2 5 1
1 \flat 7 4	2 5 1 6
1 5 6 3 4 1 4 5	1 4 3 6
	1 7 3 6
	5 6