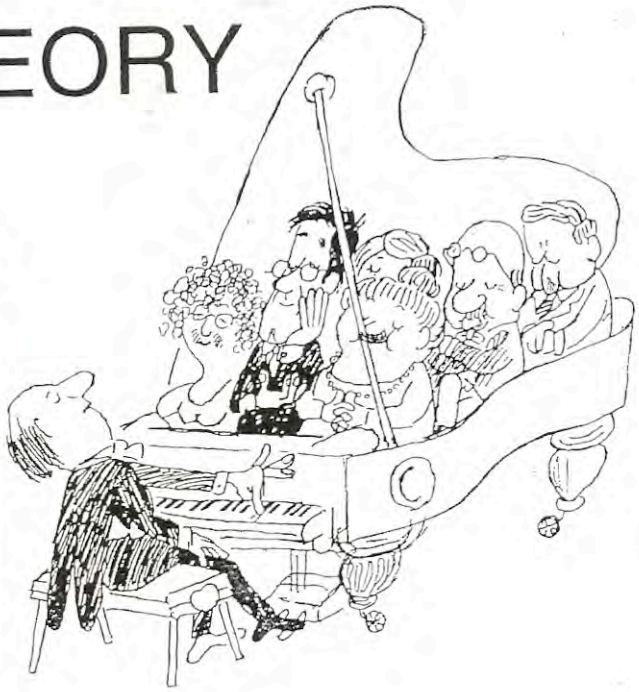
FUNDAMENTALS
OF
MUSIC THEORY



By A. Graf

WORKBOOK

QUALITY OF INTERVALS

Intervals not only have a number name but they are further classified according to their quality.

Seconds, Thirds, Sixths and Sevenths on the staff are called Major and Minor. Fourths and Fifths are called Perfect, Augmented or Diminished.

In this book, Major intervals are designated by a plus sign (+).
Minor intervals are designated by a minus sign (−).
Perfect intervals are designated by the letter "P".
Augmented intervals are designated by the letter "A".
Diminished intervals are designated by the sign "o".

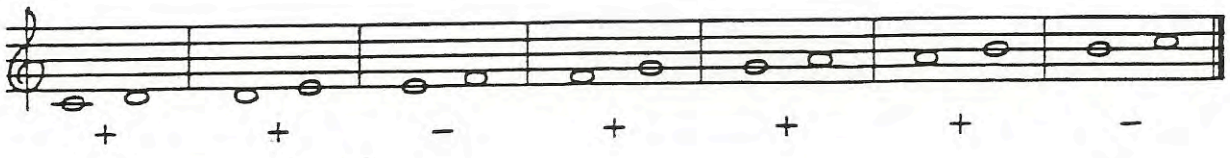
Major intervals become minor when made smaller by one note and vice versa.
Major intervals become augmented when made larger by one note and vice versa.
Minor intervals become diminished when made smaller by one note and vice versa.
Perfect intervals become diminished when made smaller by one note and vice versa.
Perfect intervals become augmented when made larger by one note and vice versa.
Perfect intervals never become major or minor and vice versa.

An interval becomes smaller when the upper note is lowered or when the lower note is raised.

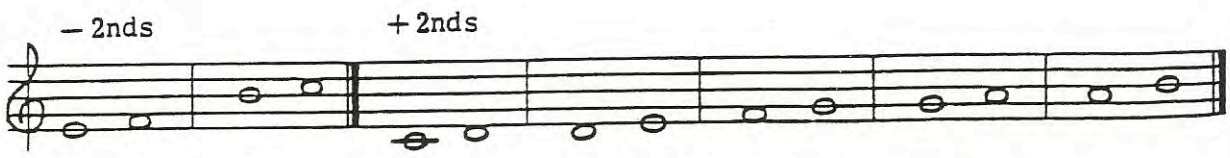
An interval becomes larger when the upper note is raised or the lower note is lowered.

SECONDS

Seconds measured upward from each note in the scale of C (white keys on the piano) appear thus on the staff:

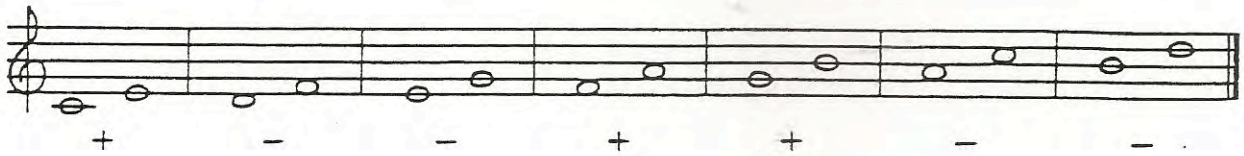


Rearranged on the staff according to quality, the Seconds appear thus:

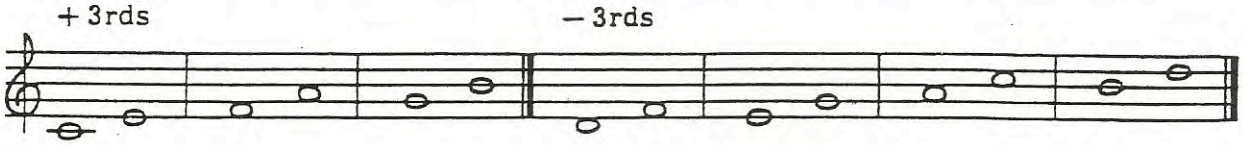


THIRDS

Thirds measured upward from each note in the scale of C appear thus on the staff:

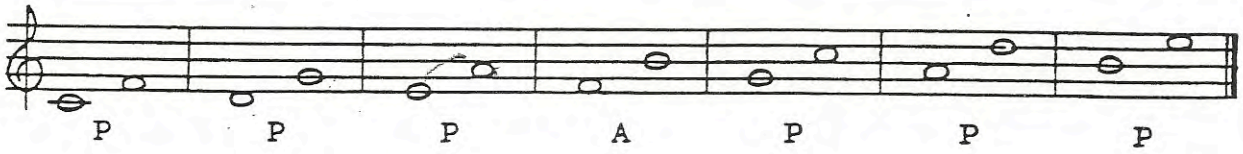


Rearranged on the staff according to quality, the Thirds are shown below:

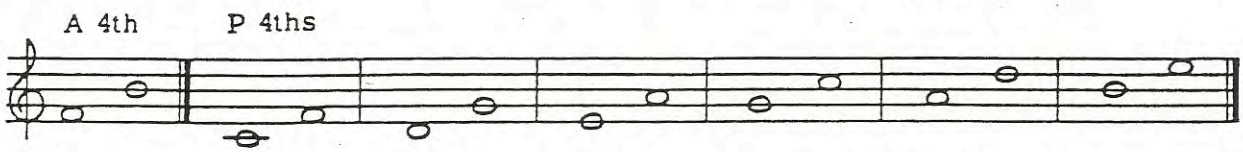


FOURTHS

Fourths measured upward from each note in the scale of C appear thus on the staff:

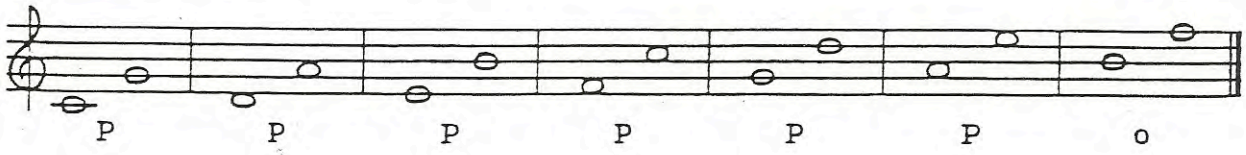


Here are the Fourths rearranged on the staff according to quality:



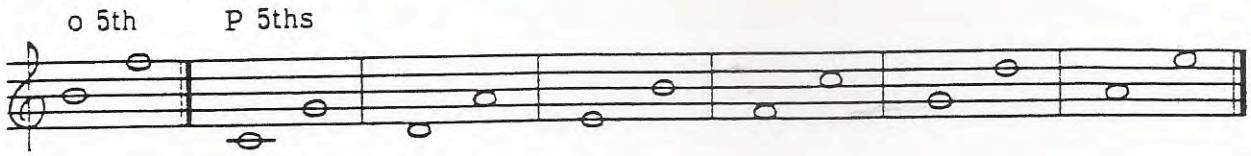
FIFTHS

Fifths measured upward from each note in the scale of C appear thus on the staff:



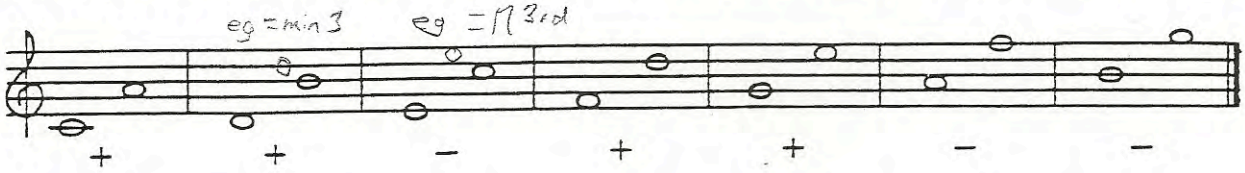
rest 5 notes

Rearranged on the staff according to quality, the Fifths appear thus:

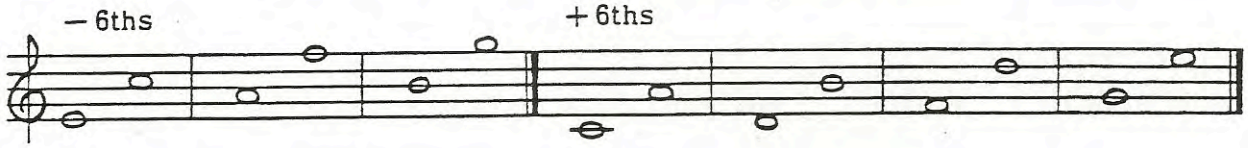


SIXTHS Invert a minor 3rd

Sixths measured upward from each note in the scale of C appear thus on the staff:

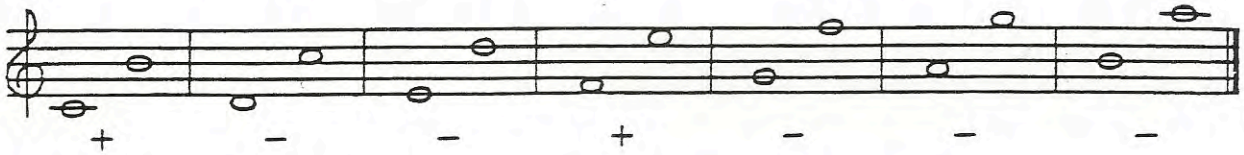


The following example shows Sixths rearranged on the staff according to quality:

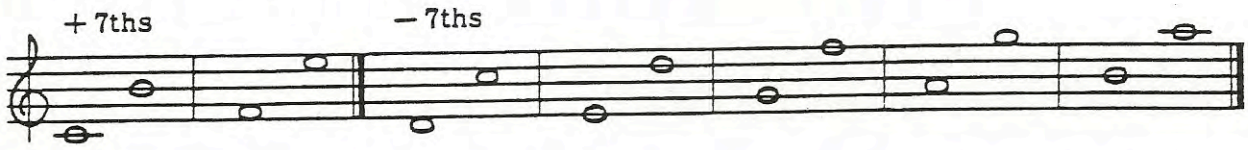


SEVENTHS All minor except C→B ♭ F→E

Sevenths measured upward from each note in the scale of C appear thus on the staff:



Here are the Sevenths rearranged on the staff according to quality:



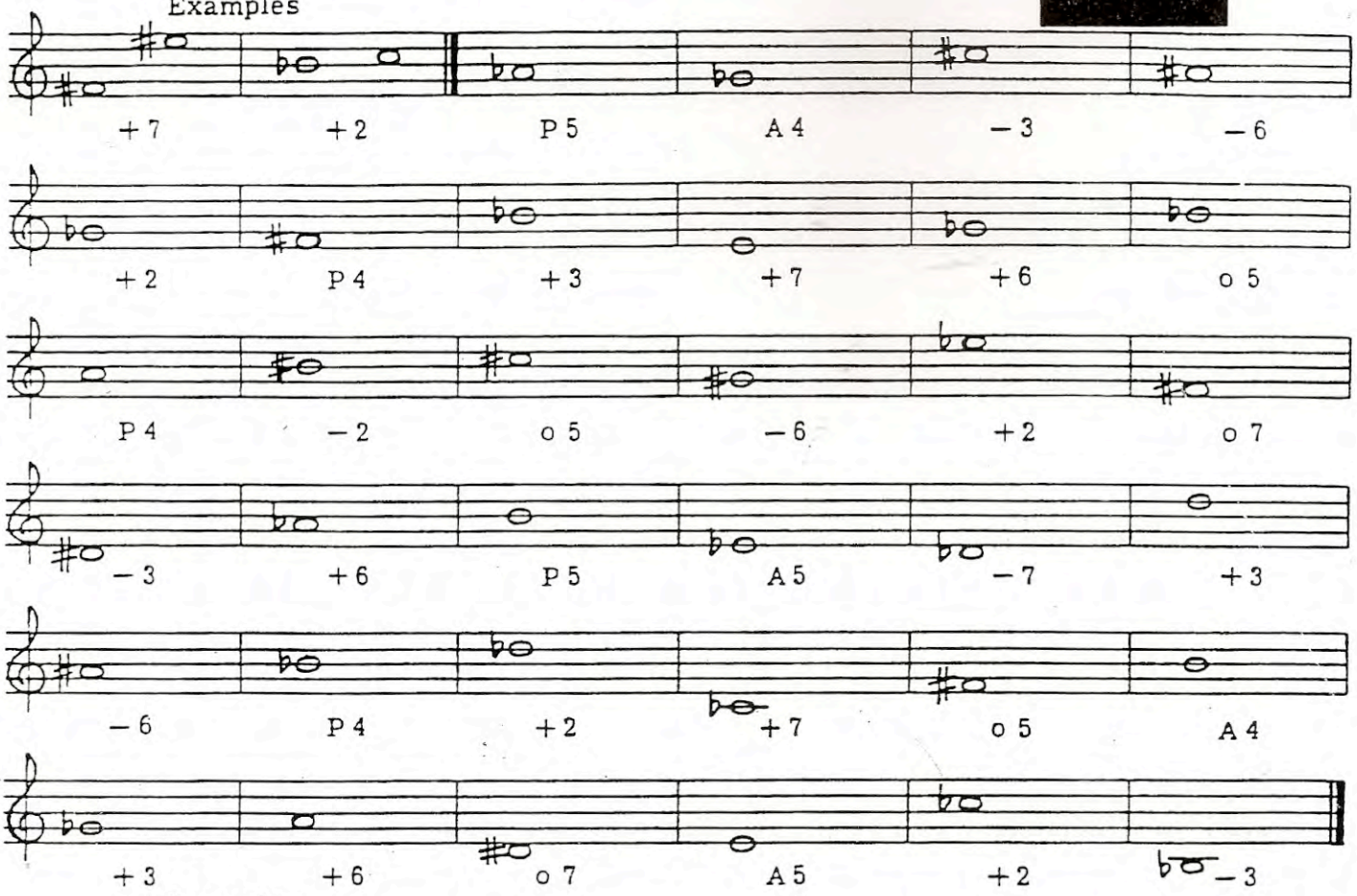
Since intervals are generally spelled as they are heard, altered Octaves are omitted in this book. When altered, a diminished octave sounds like a Major 7th, while the augmented octave sounds like a Minor 9th and they are spelled accordingly.

Before working this section of INTERVALS, learn their qualities on the staff. Only when the student has memorized thoroughly the Table of Intervals without chromatic alteration, should he attempt to change their quality by accidentals.

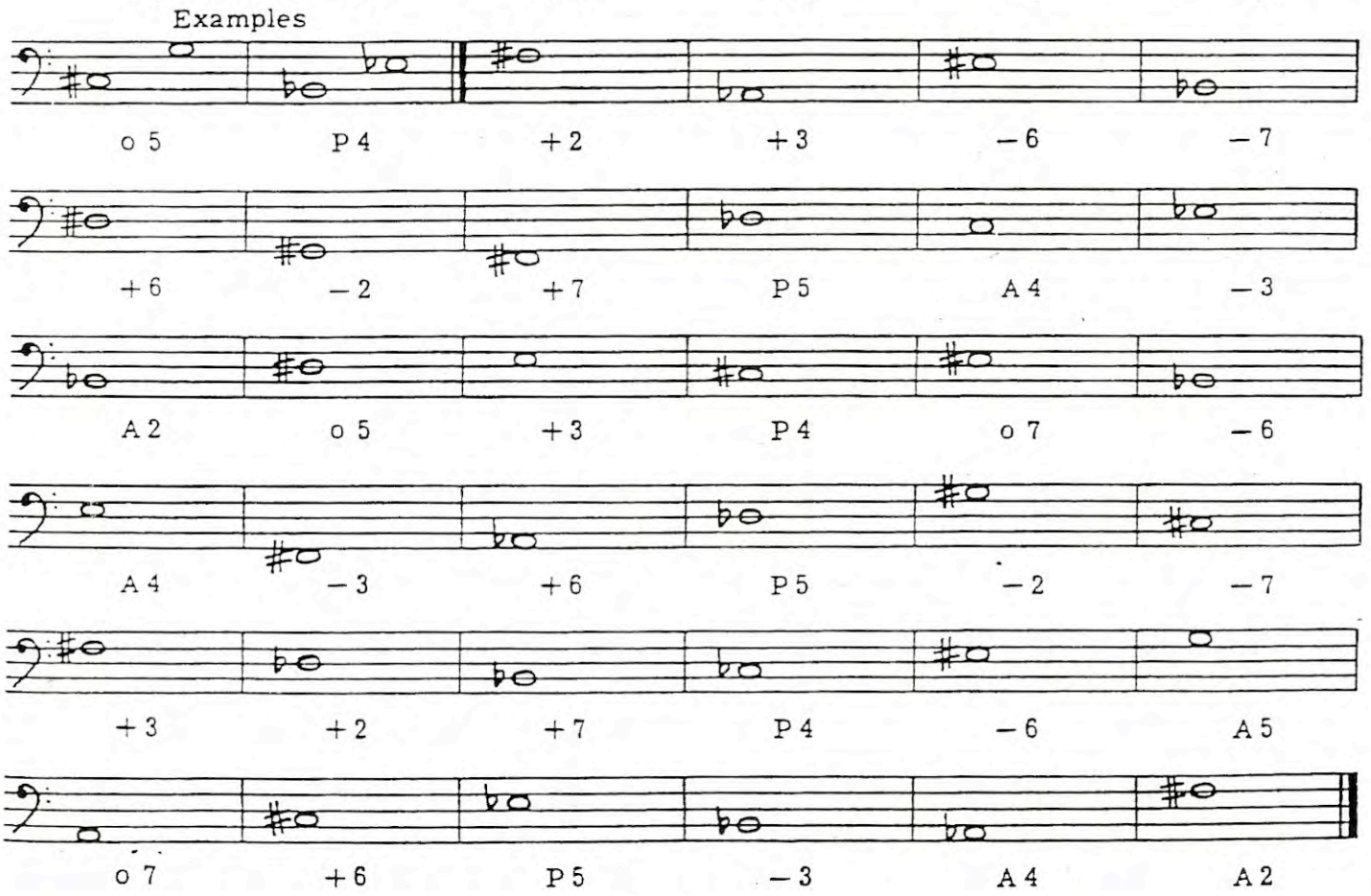
Prove to yourself that you know the Table of Intervals by going back to the beginning and reading aloud each interval with letters followed by its quality.

CONSTRUCT INTERVALS UP AS INDICATED

Examples

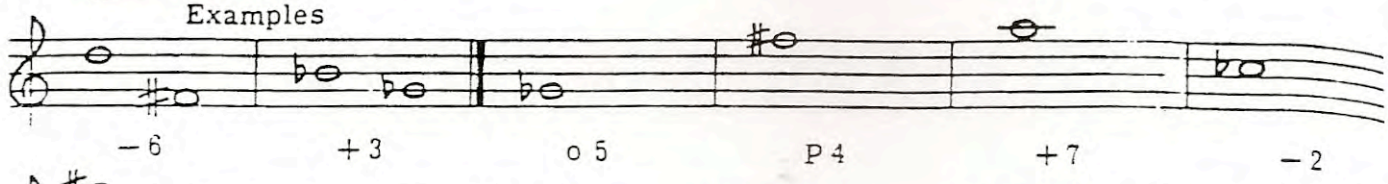


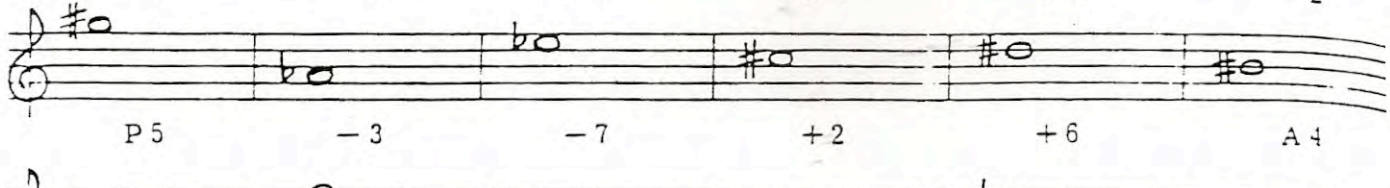
Examples

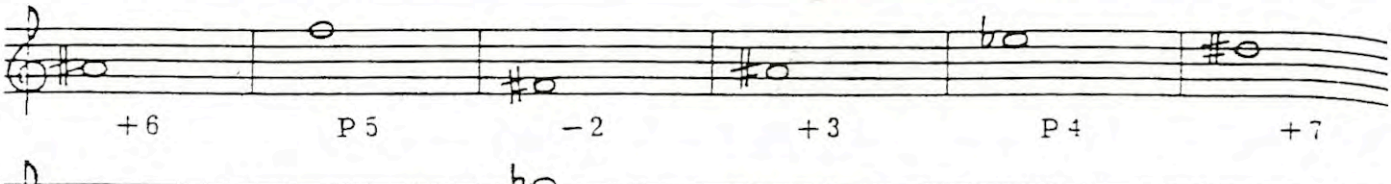


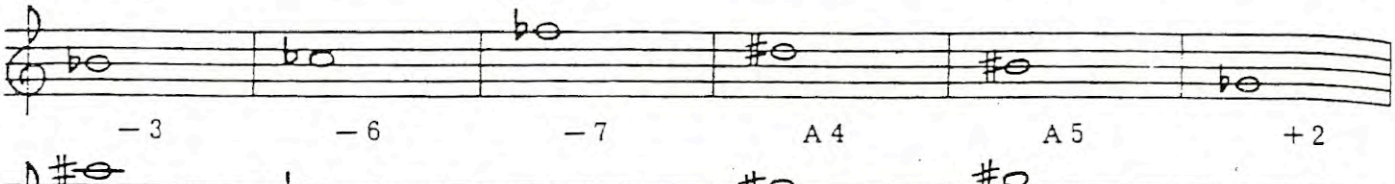
CONSTRUCT INTERVALS DOWN AS INDICATED

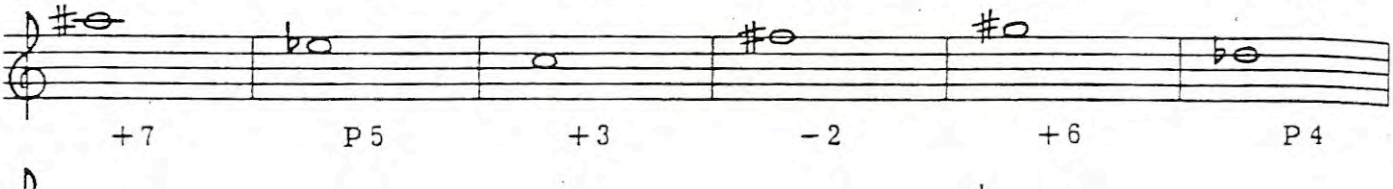
Examples

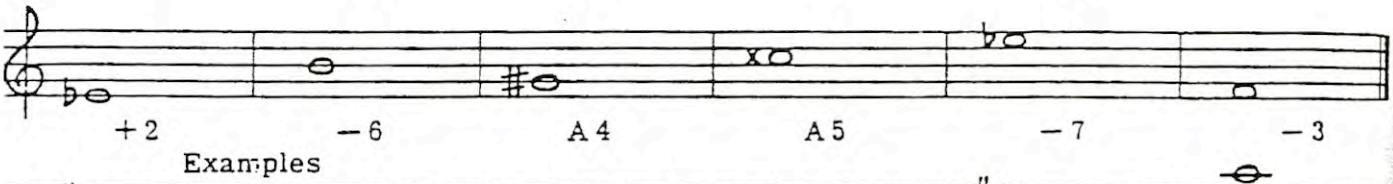




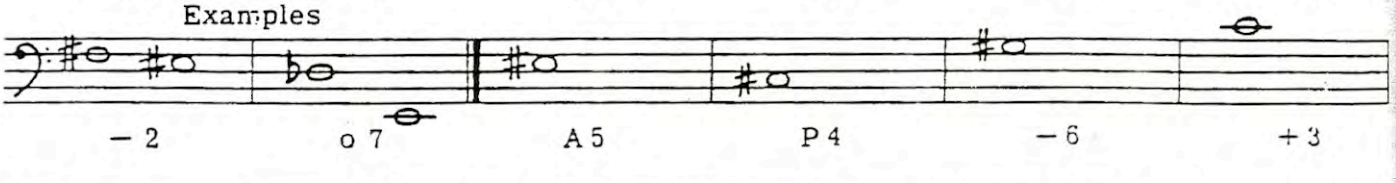


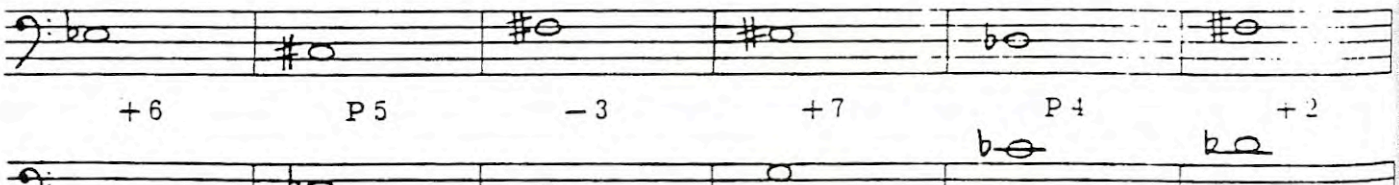


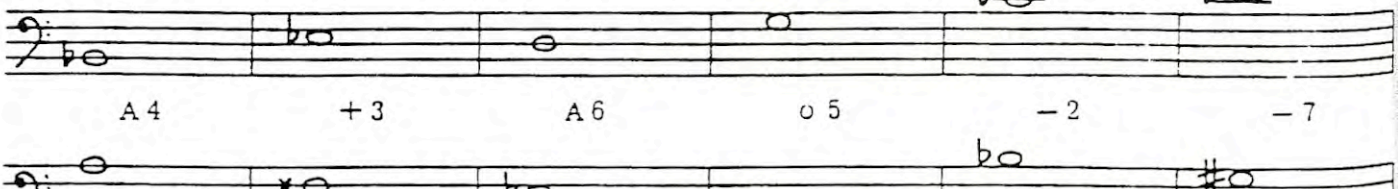


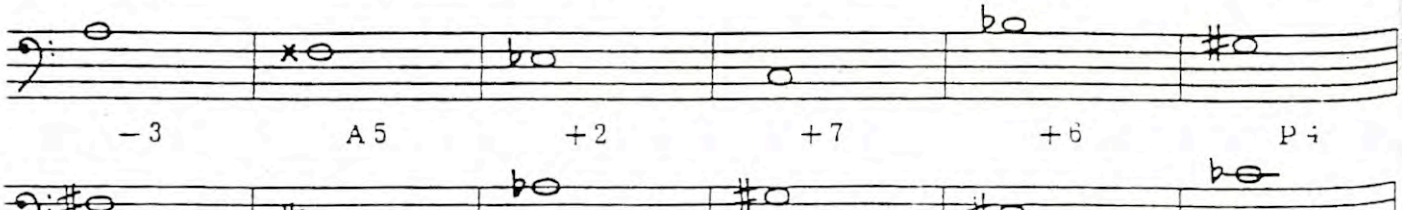


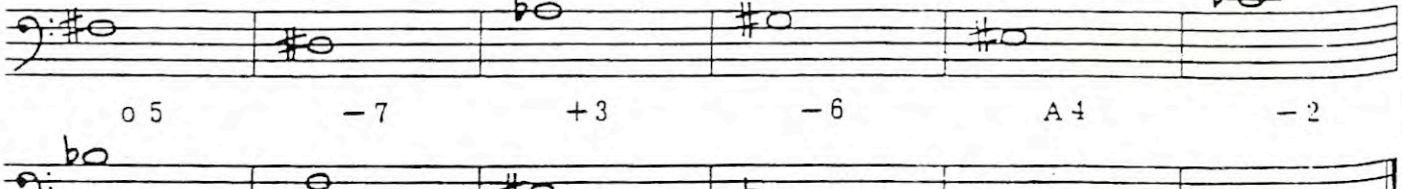
Examples

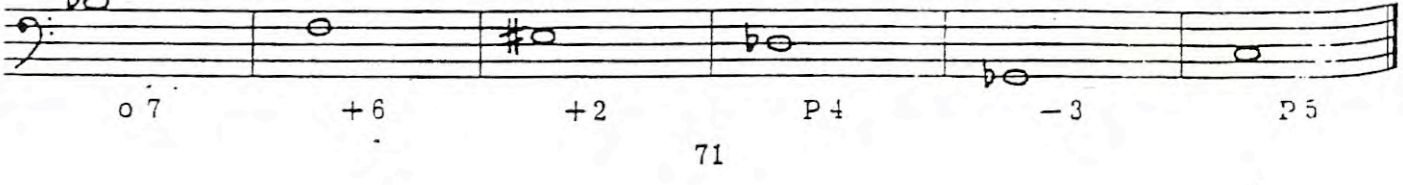




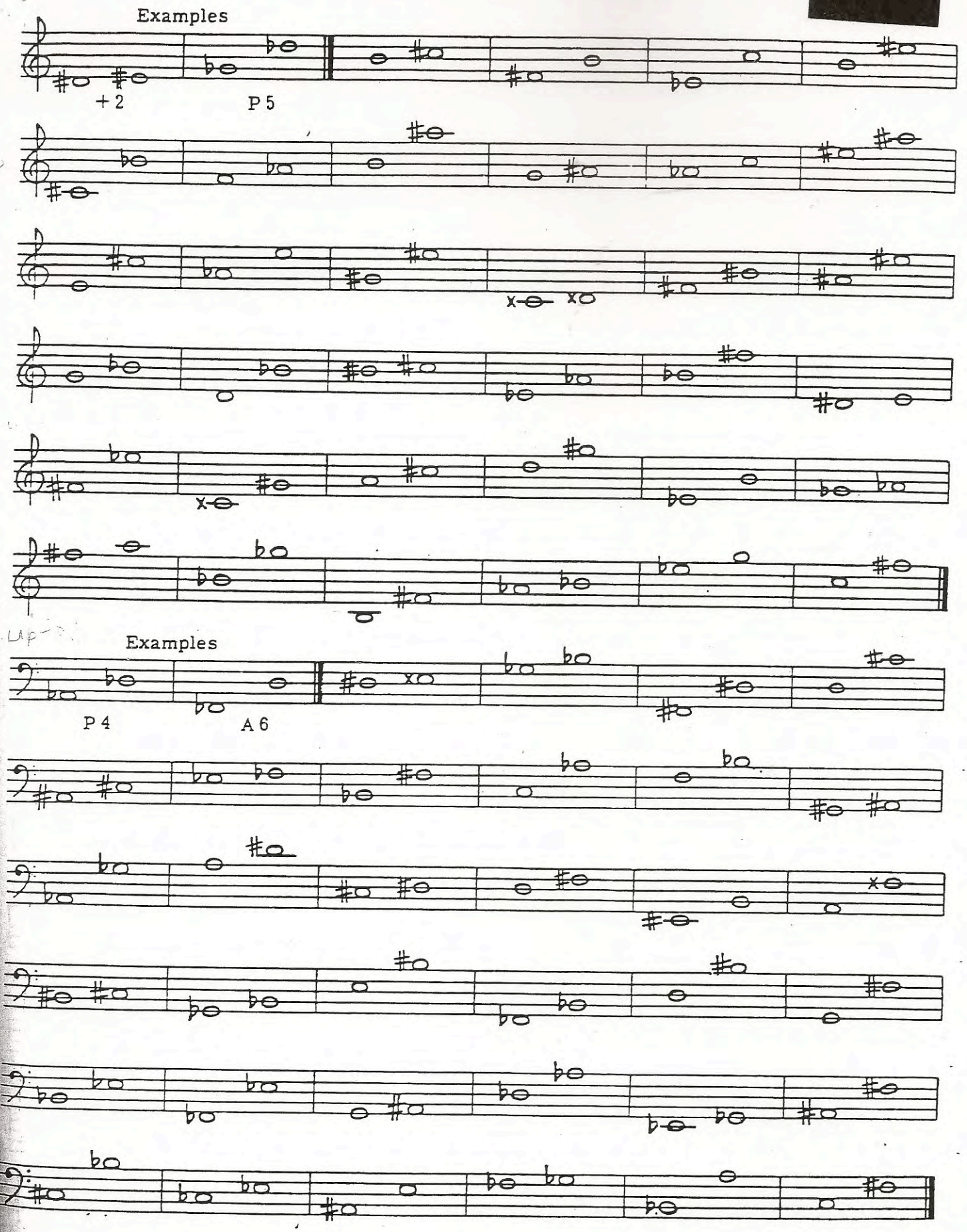






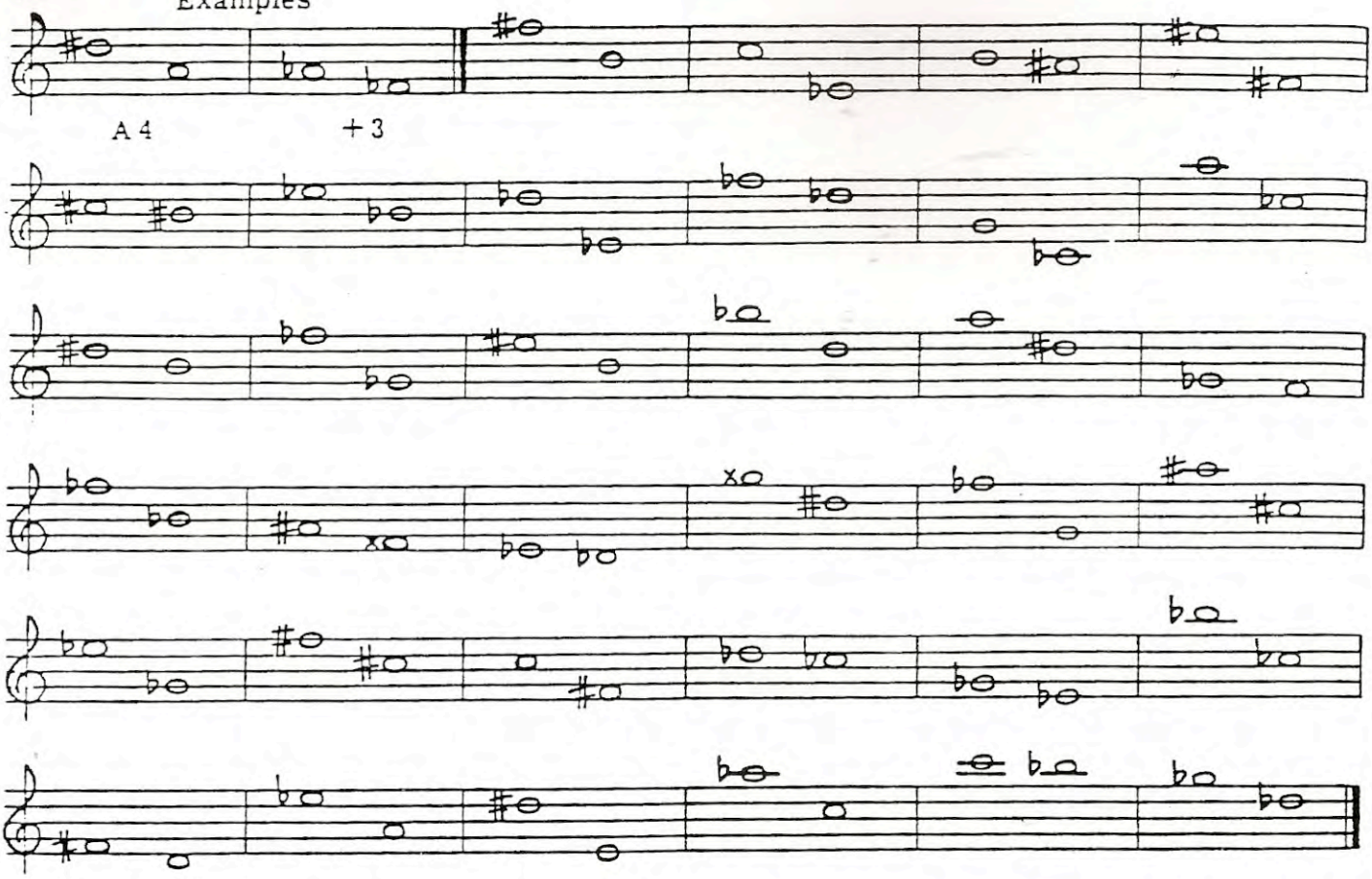


DETERMINE SIZE AND QUALITY OF THESE INTERVALS UP

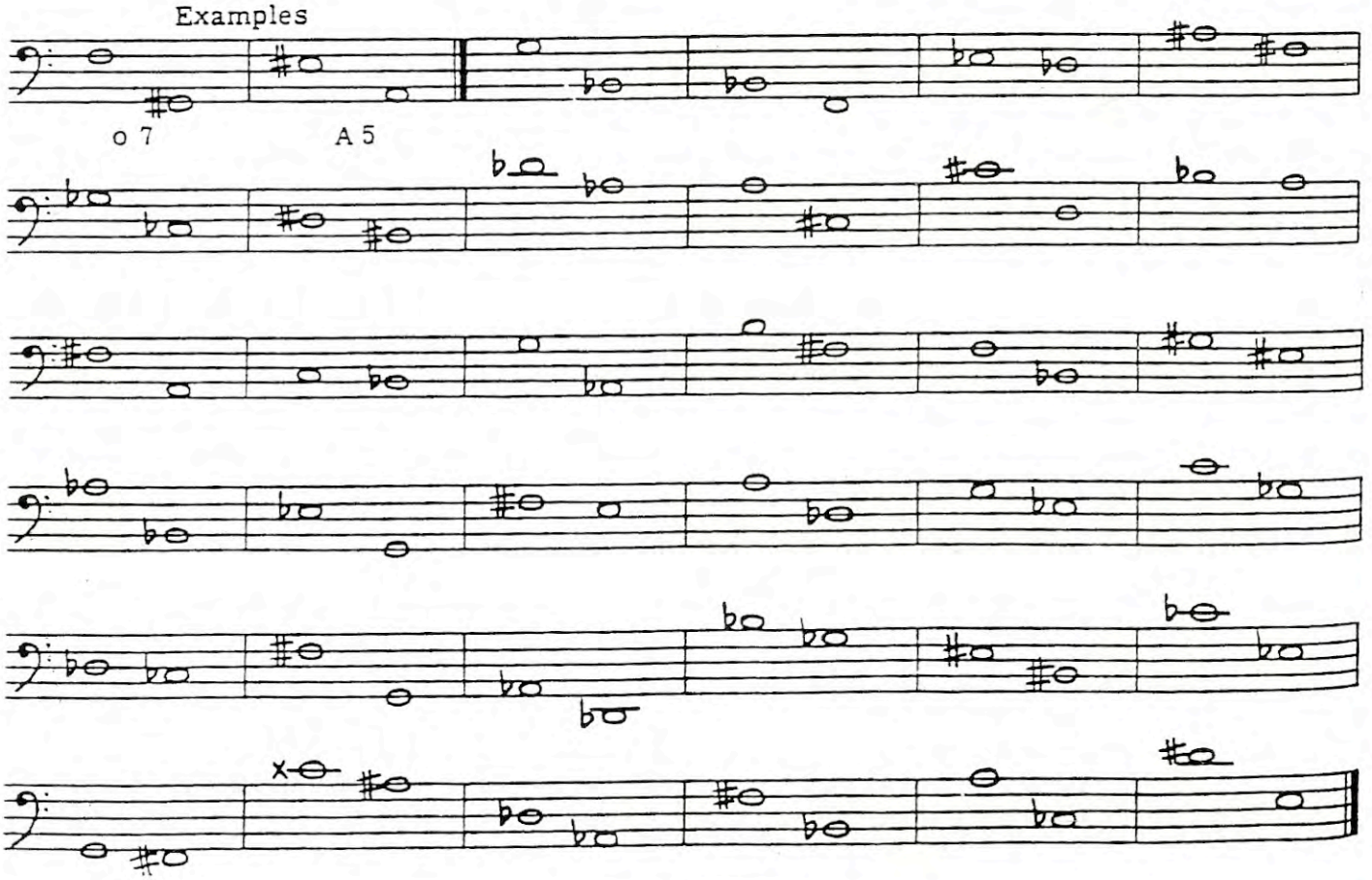


DETERMINE SIZE AND QUALITY OF THESE INTERVALS DOWN

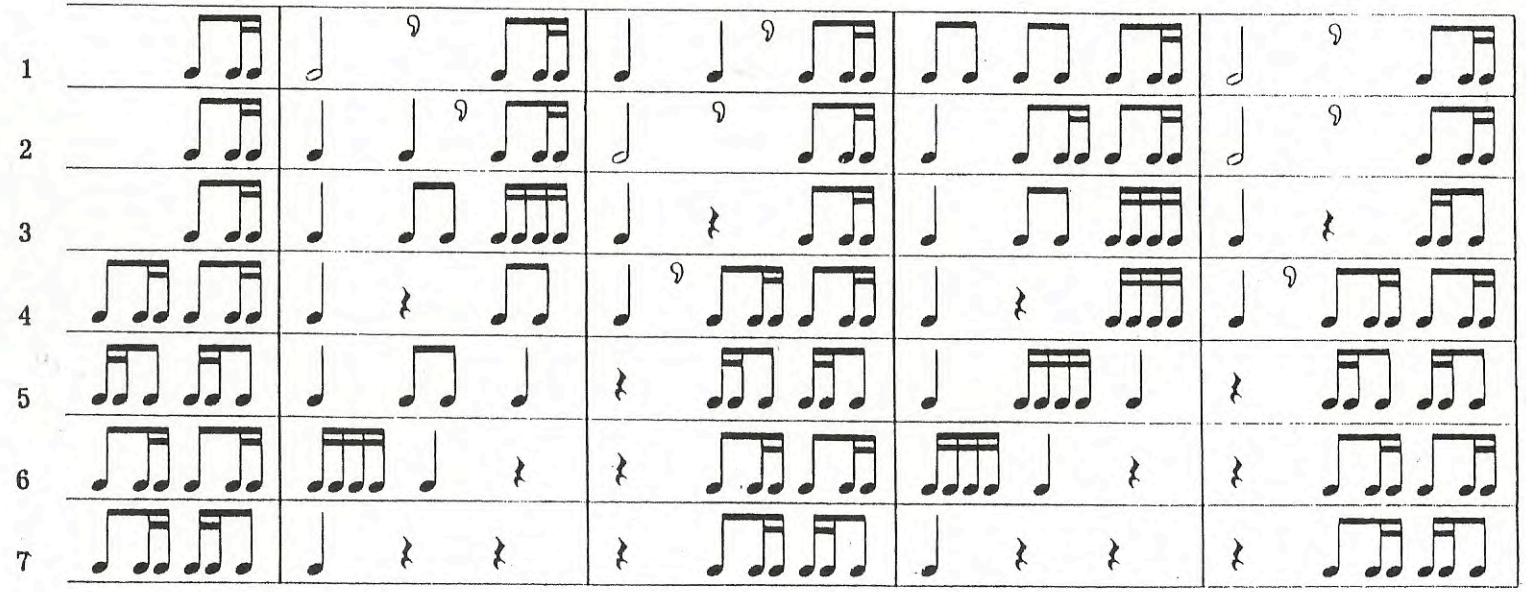
Examples

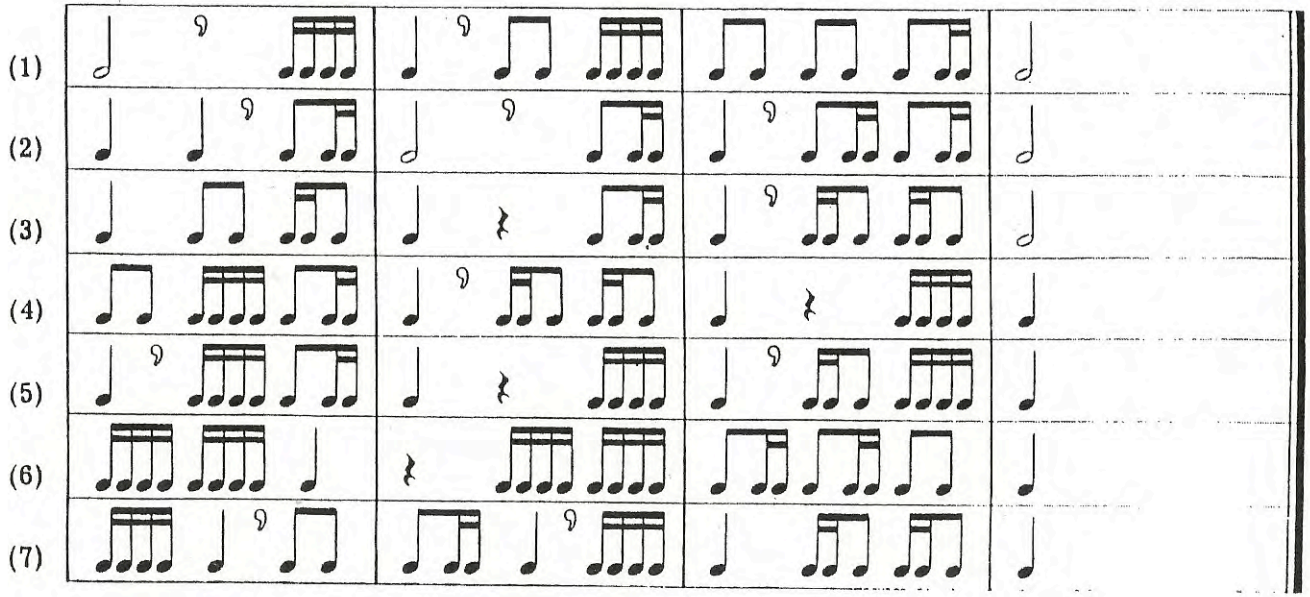


Examples

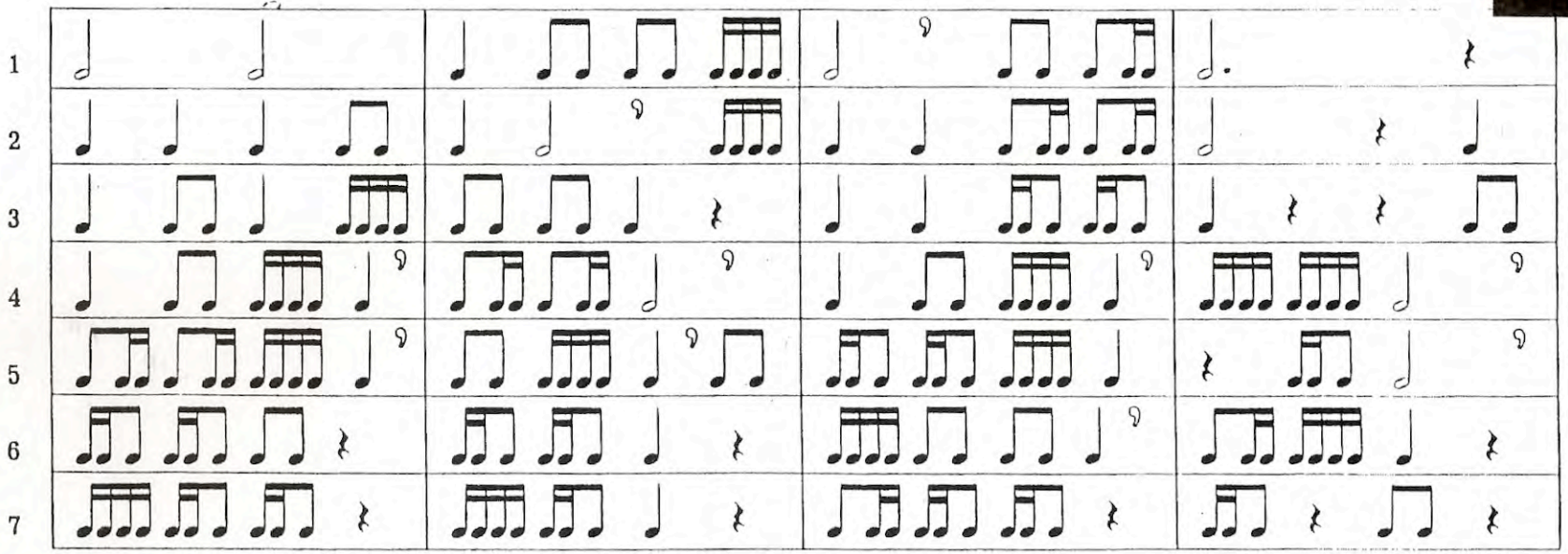


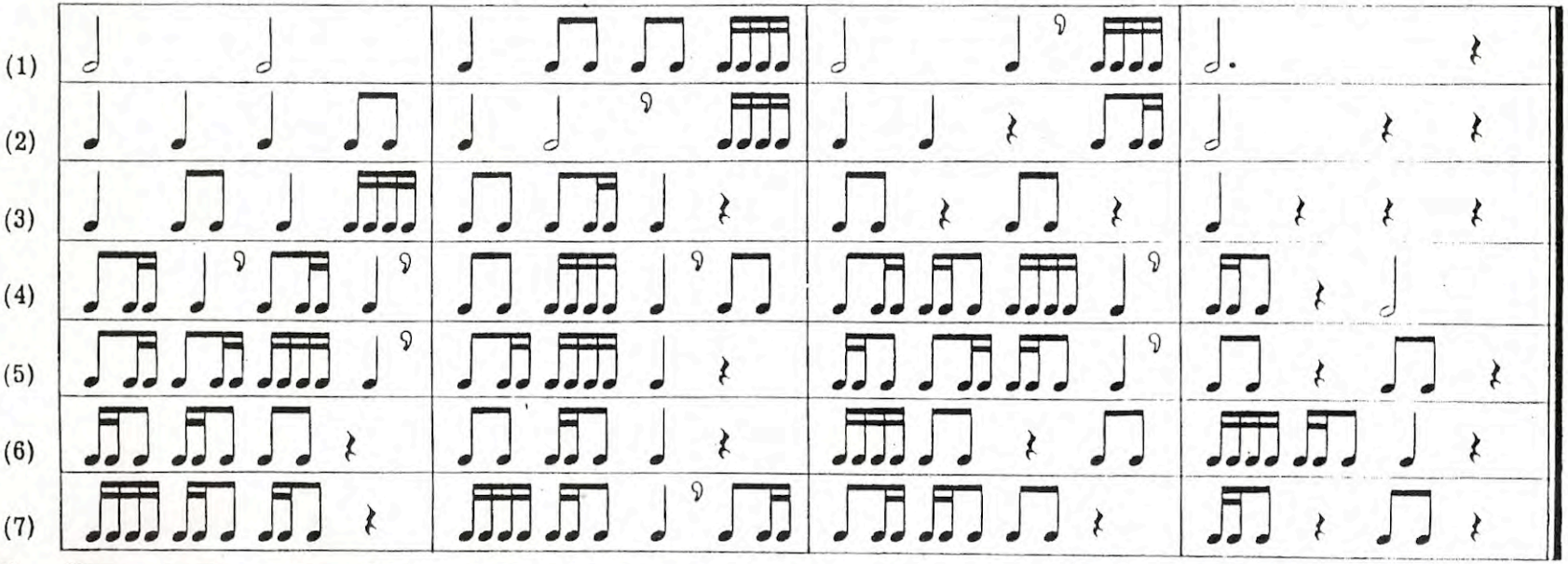
$\frac{3}{4}$ is the time signature.





$\frac{4}{4}$ is the time signature.

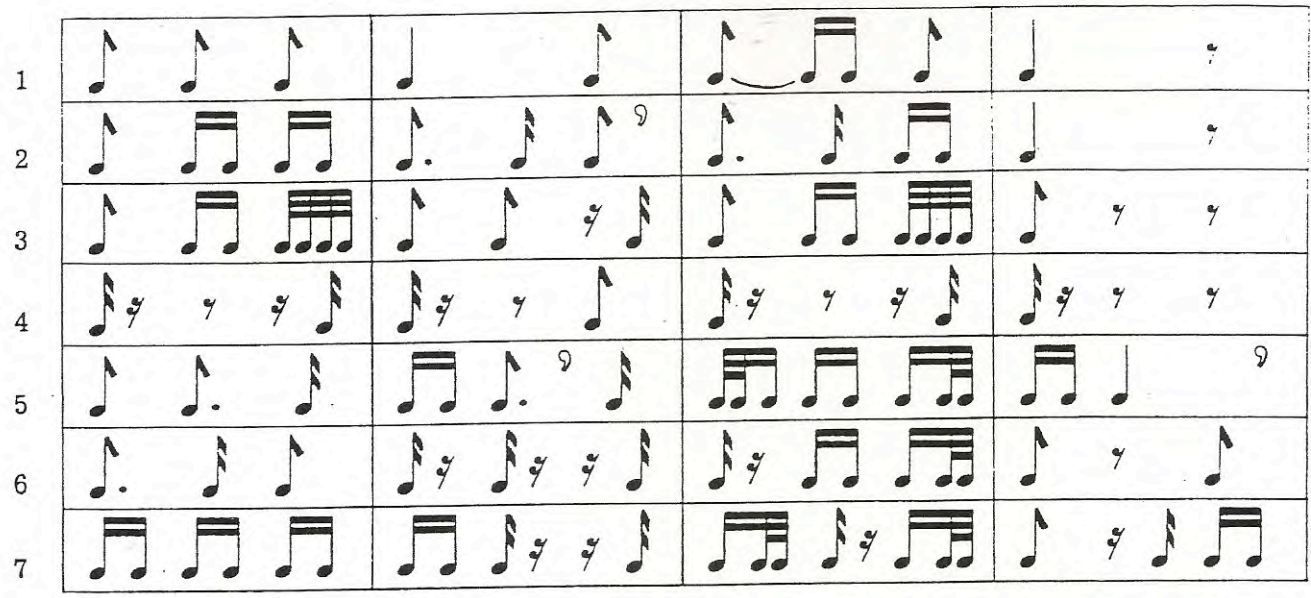


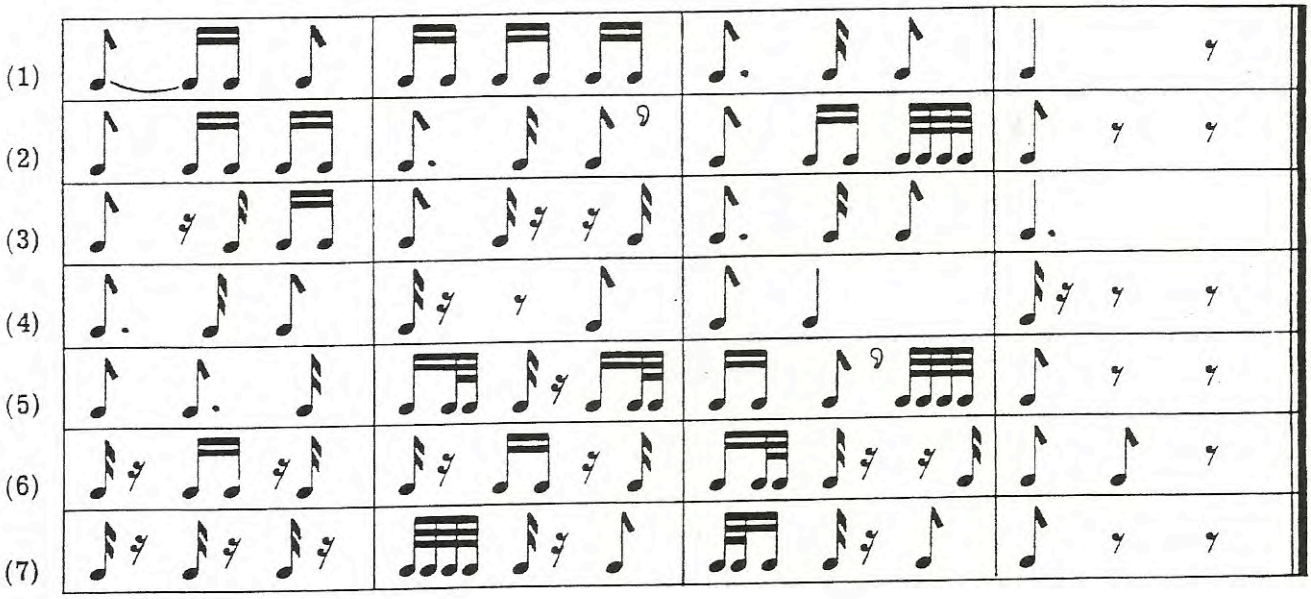


$\frac{3}{8}$ is the time signature.

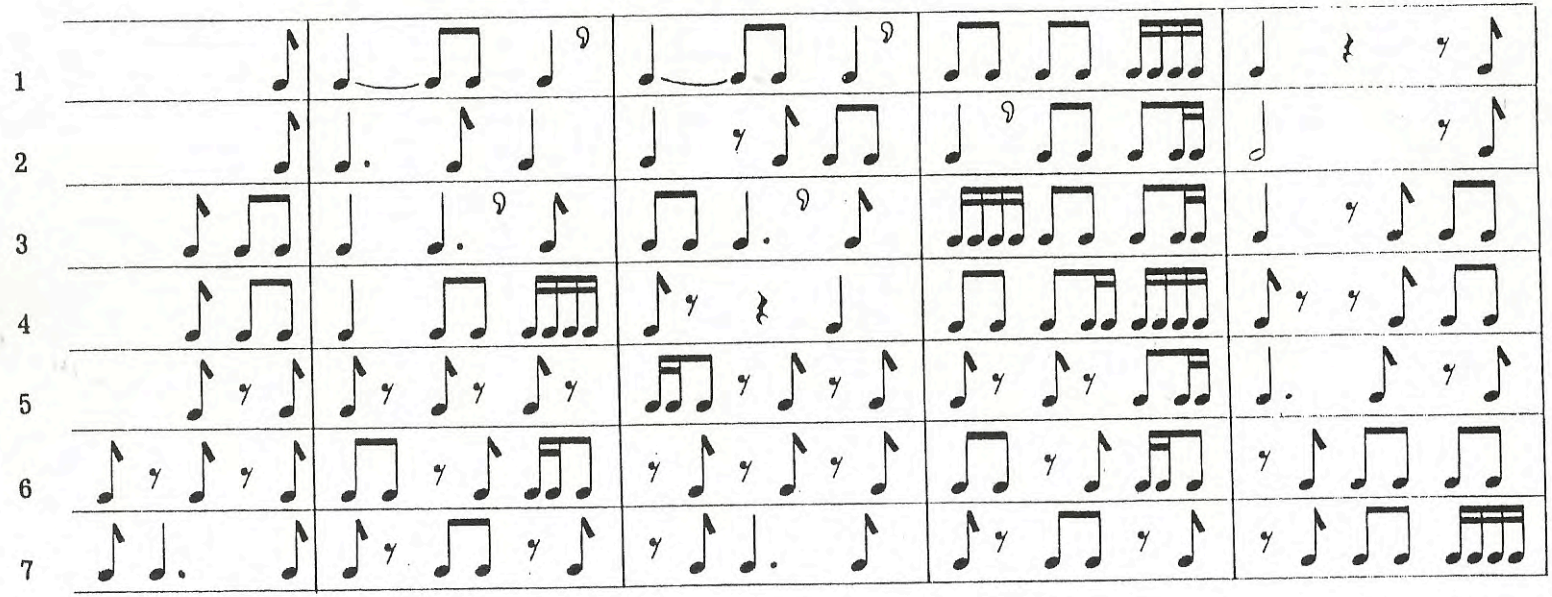
Conduct the triple-meter figure for two measures, counting, "1 + 2 + 3 +, 1 2 3."

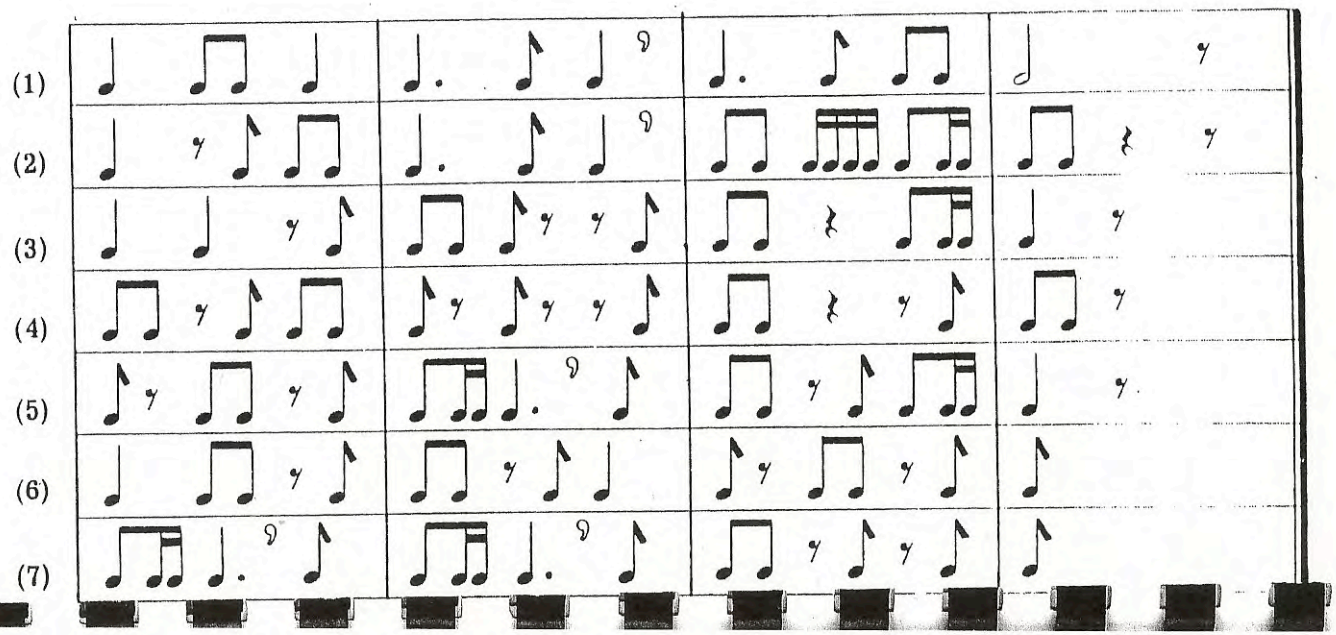
Start singing the rhythms on the downbeat of the third conducted measure.



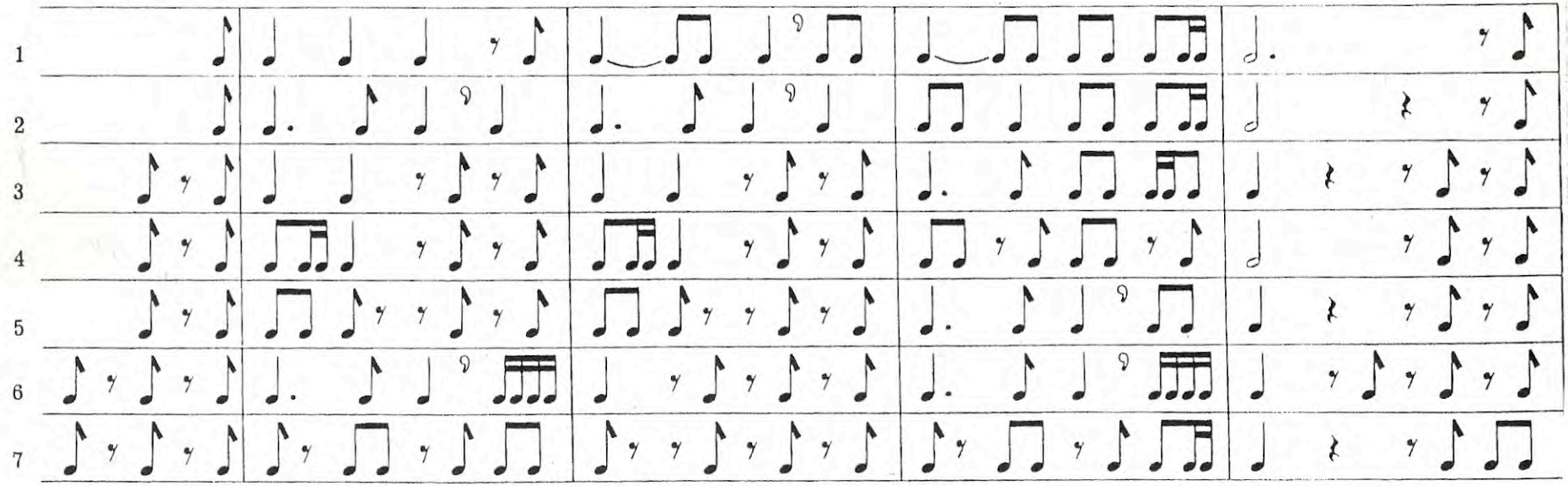


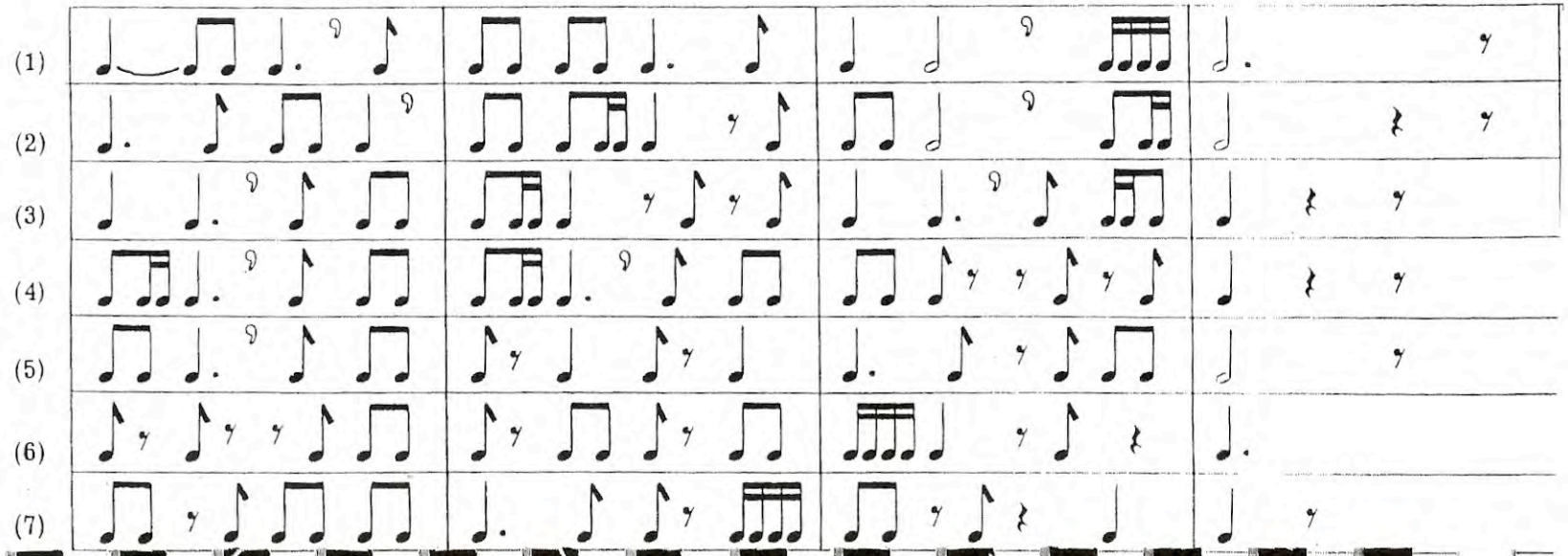
$\frac{3}{4}$ is the time signature.





$\frac{4}{4}$ is the time signature.





Divide into 3

3 Large beats divided into 2

4 are accented

same as 2/4

56

COMPOUND DUPLE METER

x2

6/8 = "Superman is in 6/8"

Upbeat

principle

Mozard horn concerto

Hunting Song Traditionaly

1 2 3 4 5 6

Cut off on Foot Beat

1.	♩.	♩.	♩. ♩.	♩. ♩.	♩. 𝄾 ♩.
2.	♫	♩. ♫	♩. ♩.	♩. 𝄾 ♫	♩. 𝄾 ♫
3.	♫	♩. ♩.	♫ ♩. 𝄾	♫ ♩.	♩. 𝄾 ♫
4.	♩.	♩. ♩.	♫ ♫	♩. 𝄾 ♫	♩ 𝄾 ♩.
5.	♫	♫ ♫	♩. ♩. 𝄾	♫ ♫	♩. 𝄾 ♫
6.	♩.	♫ ♩.	♩. ♩.	♩. 𝄾 ♫	♩ 𝄾 ♩.
7.	♩.	♫ ♫	♫ ♩. 𝄾	♫ ♫	♩. 𝄾 ♩.

(Ta, ah, ca)

(1)	♩. ♩.	♩. 𝄾	♩. ♩.	♩.
(2)	♩. ♫	♩. ♩. 𝄾	♫ ♫	♩.
(3)	♩. ♩.	♫ ♫	♩. 𝄾 ♫	♩.
(4)	♩. ♫	♫ ♫	♩.	♩ 𝄾
(5)	♫ ♫	♩. 𝄾 ♫	♫ ♫	♩.
(6)	♫ ♩. 𝄾	♫ ♩. 𝄾	♩. ♫	♩ 𝄾
(7)	♫ ♫	♫ ♫	♫ ♩.	♩.

3/4 is Um pa pa Waltz

The Modern Jazz quartet

COMPOUND (TRIPLE) METER

9/8 (3×3) same as 3/4

count: 1 2 3 4 5 6 7 8 9

(only 1 note sounds)

to = 6 quavers

1.				3 beat note
2.				
3.				
4.				
5.				
6.				
7.				

(1)				
(2)				
(3)				
(4)				
(5)				
(6)				
(7)				

Flamenco & Irish

COMPOUND (QUADRUPLE) METER

$\frac{12}{8}$ Same as 4/4

(1) 2 3 (4) 5 6 (7) 8 9 (10) 11 12

Greek 7

1.				
2.				
3.				
4.				
5.				
6.				
7.				

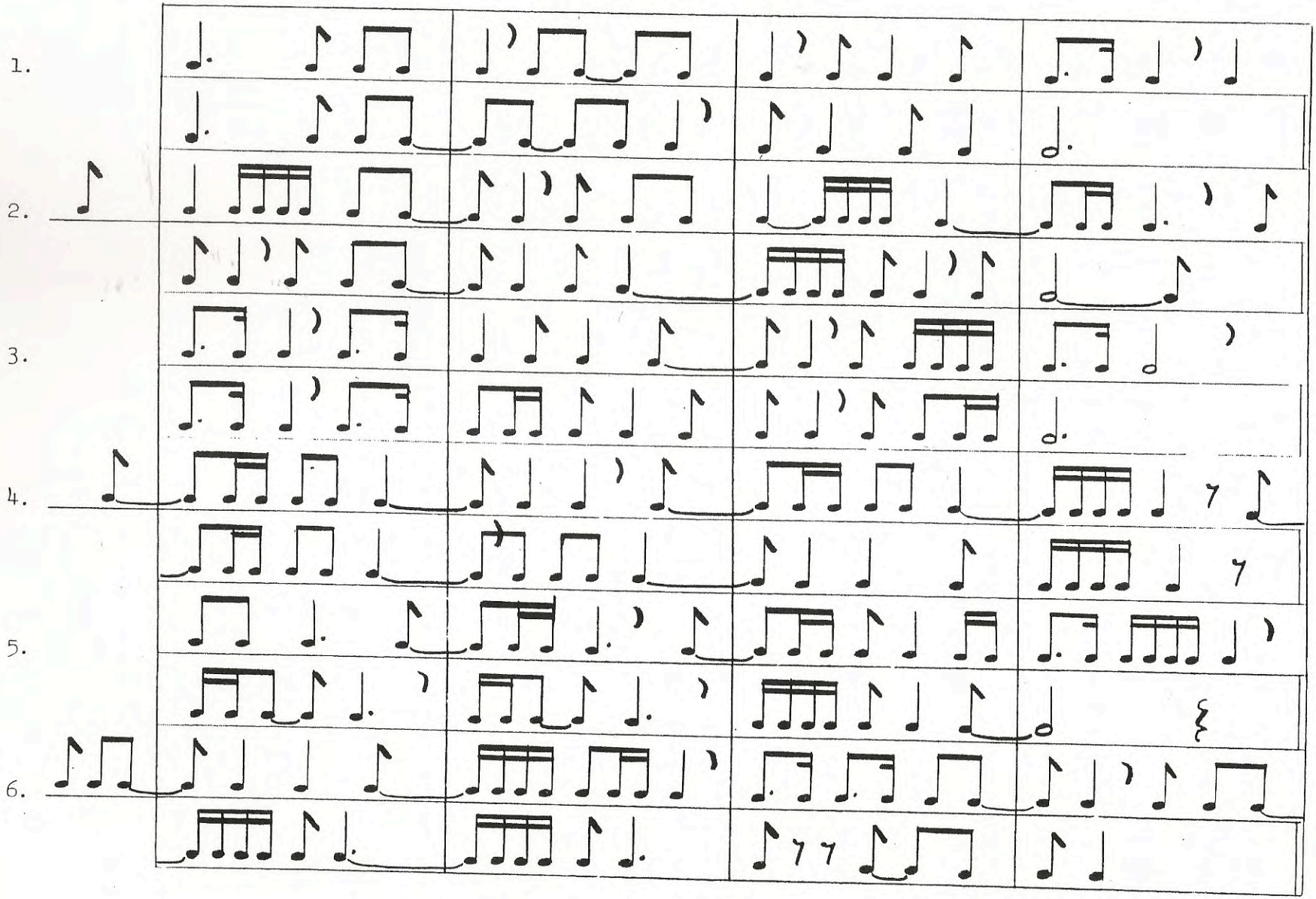
(1)				
(2)				
(3)				
(4)				
(5)				
(6)				
(7)				

SIMPLE TRIPLE METER

1. 3/4
2. 3/4
3. 3/4
4. 3/8
5. 3/8
6. 3/2

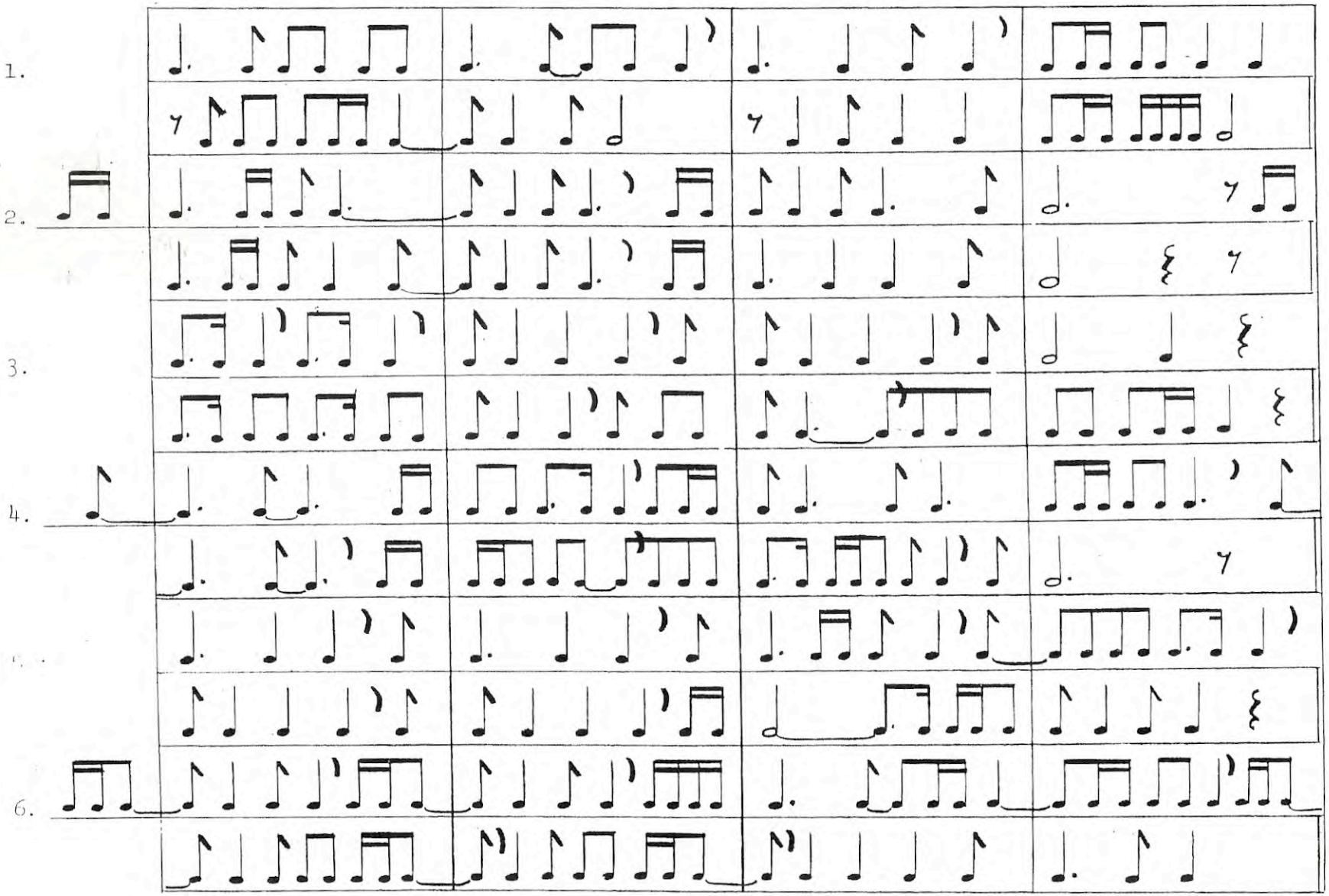
SIMPLE TRIPLE METER

$\frac{3}{4}$ Syncopation: ♩ , ♪



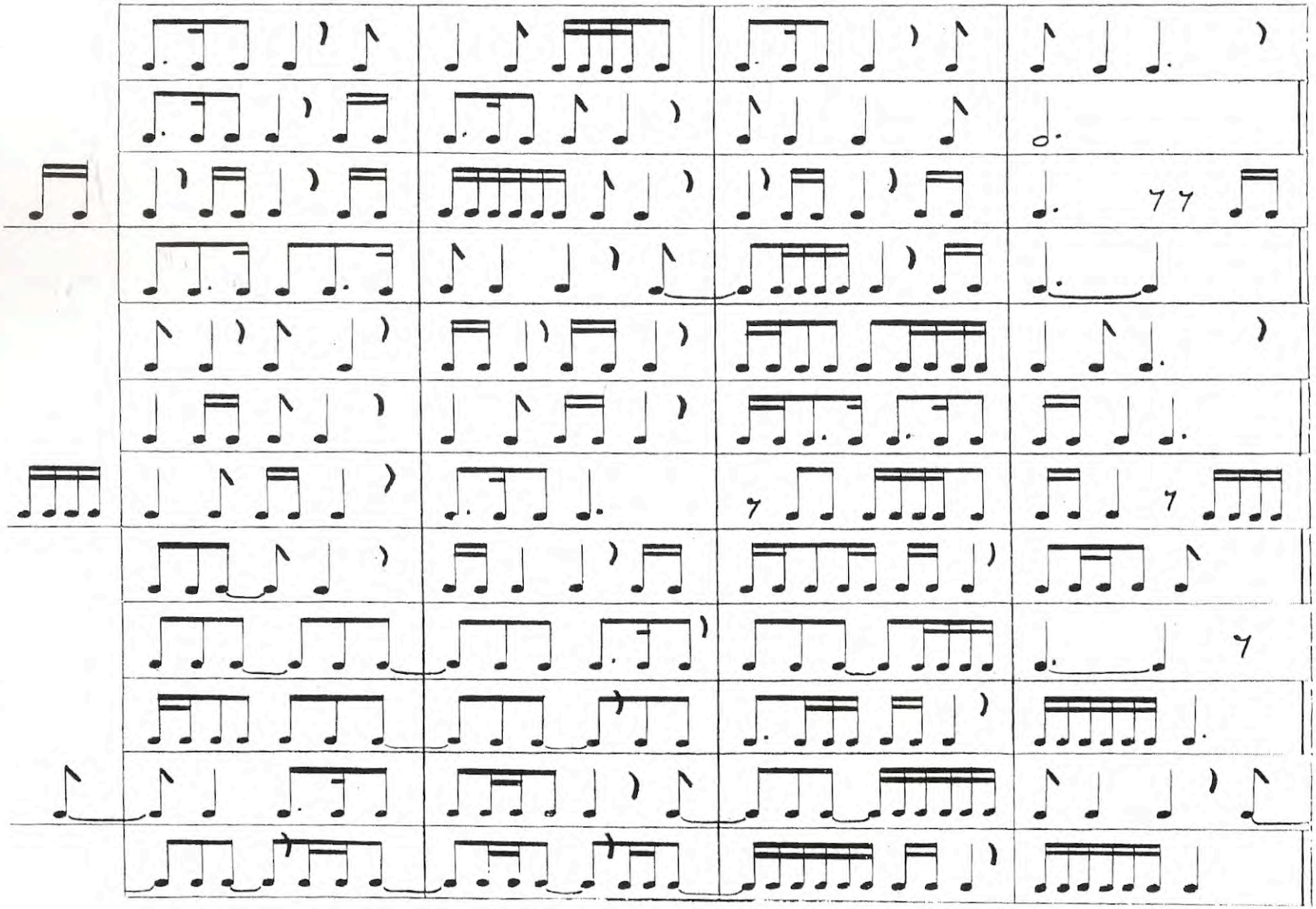
SIMPLE QUADRUPLE METER

4
4 Syncopation: ♩ , ♪



COMPOUND DUPLE METER

$\frac{6}{8}$ Syncopation:



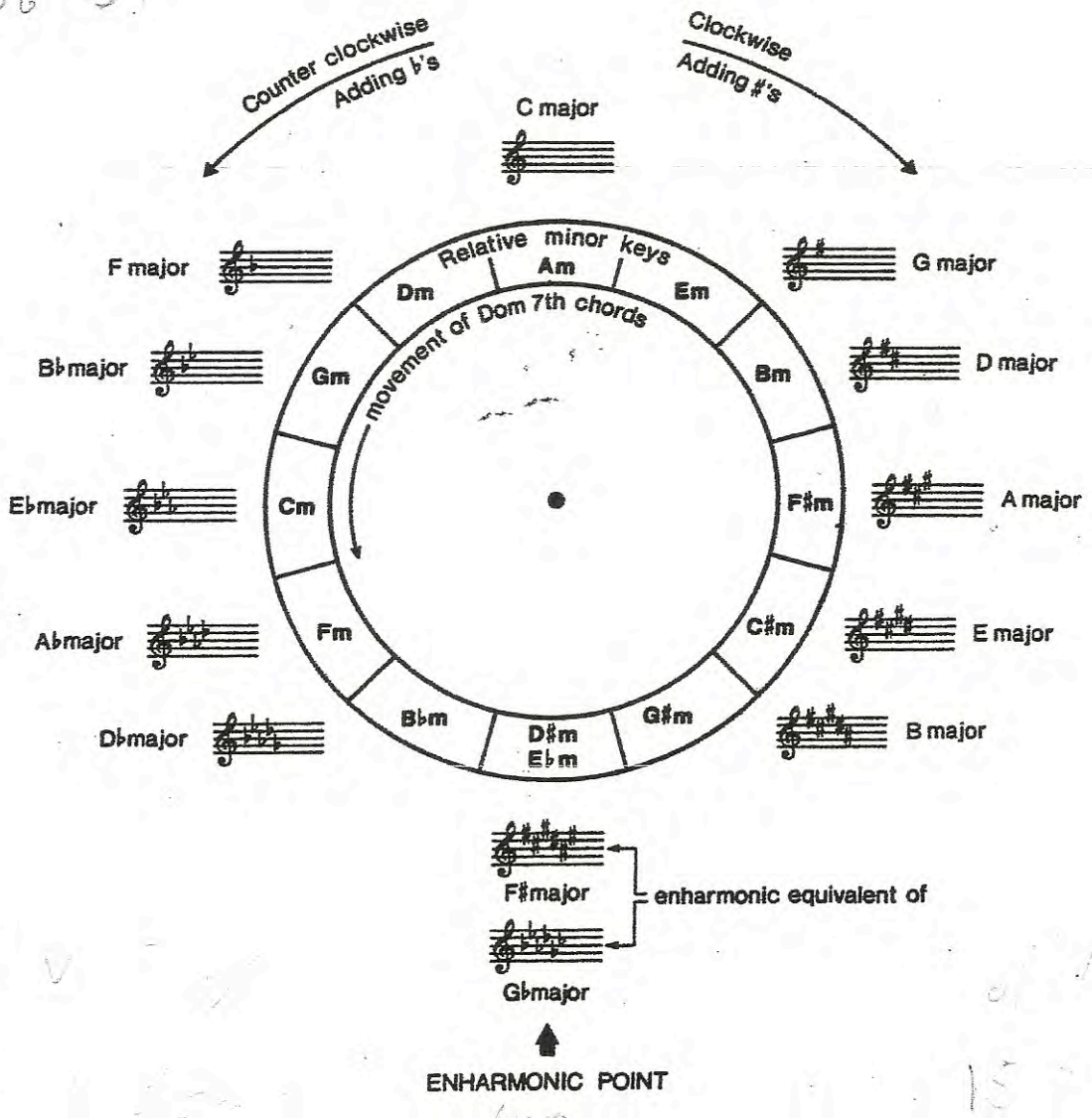
THE KEY CYCLE

The cycle of keys, sometimes referred to as the **cycle of 5ths**, illustrates how key signatures revolve in a circle.

A gradual build up of sharps will be seen, extending to the key of six sharps, moving around the cycle in a clockwise direction.

Still moving in a clockwise direction a gradual decrease of flats takes place until the starting point is reached with C major.

Considering the cycle from an anti-clockwise direction a gradual increase of flats takes place until the enharmonic point is reached.

Dominant 7th chords always tend to move in an anti-clockwise direction, stopping off at suitable major or minor tonic triads on the way. Should a Dominant 7th move to another Dominant 7th on the next stage of the key cycle this new chord must continue to at least the next stage before it can be resolved.

It is advisable to retain a clear mental picture of the key cycle in order to understand its application.