Basic Tools For Improvisation

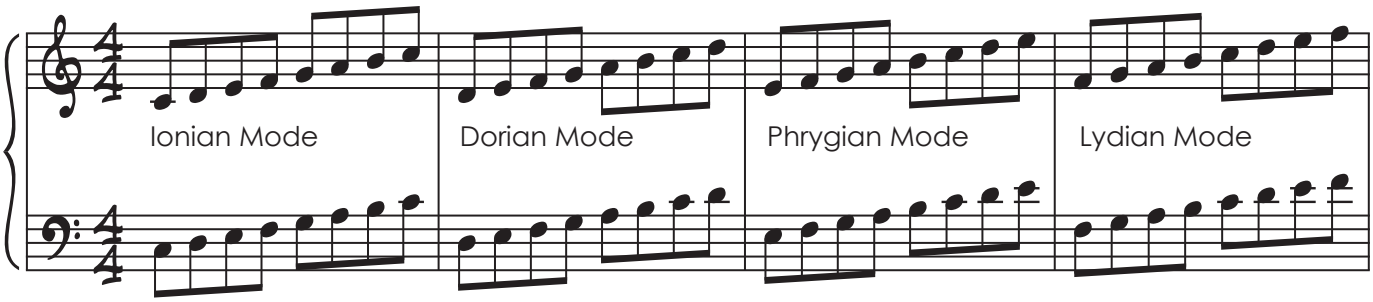
This document is to help guide you through some of the basic tools needed to start understanding chords and scales related to improvisation. These are things that you should be working on daily.

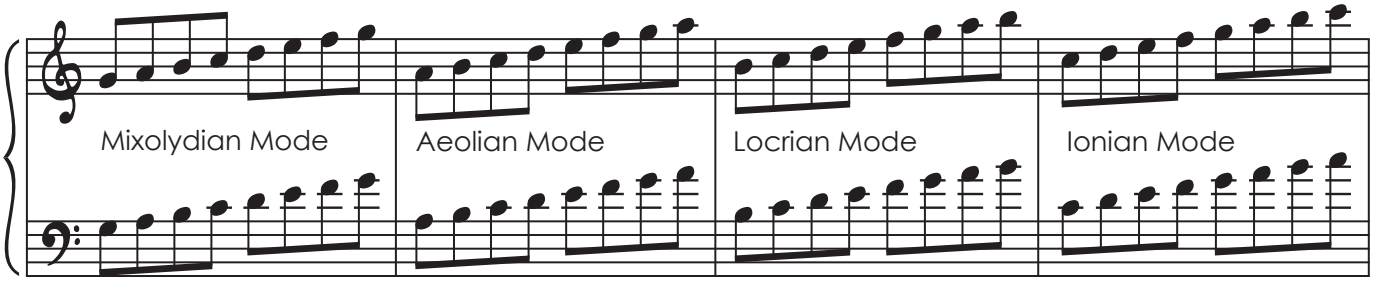
Ways to practice:
1. Pick one key and move through the variations
   (Ex: Major Scale Modes, 3rds, Triads and 7th chords in one key)
2. Pick one variation and move it through 12 keys
   (7th chords chords in all 12 keys)

These exercises will make more sense as we move through the sheet.

Scales

Scales are an important aspect of improvisation, but are not the key to improvisation. Melody is the key, but we need to understand the scale to create melody.
We are going to look at the major scale and the modes of each scale (playing the scale from different scale degrees.

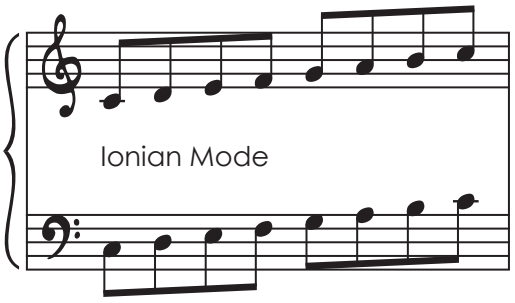




Above is the C major scale and the modes built from all the degrees of the scale.
Notice how the key signature didn't change.
There are 4 important modes that we must know to start Improvising
1. Ionian (root) 2. Dorian (2nd degree) 3. Mixolydian (5th degree) 4. Locrian (7th degree)

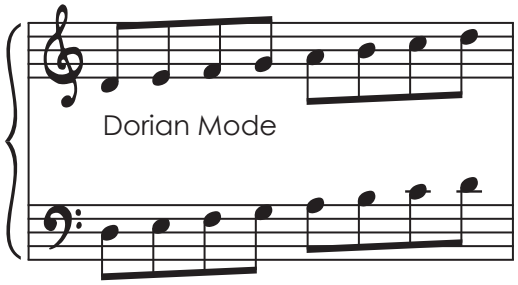
©

C ma7



For Improvisation on a Major chord,
we use the Major Scale

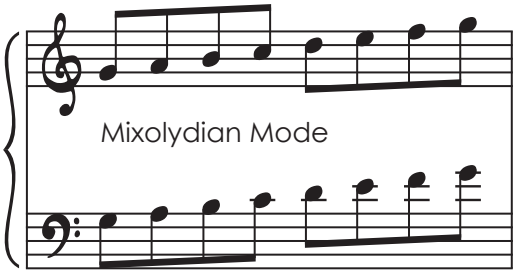
D mi7



For minor chord improvisation, we use the 2nd mode
of the major scale (dorian).

Example: If we see a Emi7 chord (we should know
the E is the 2nd degree of a D Major Scale (2#'s)
So an Emi Dorian scale had the same key signature
as D Major

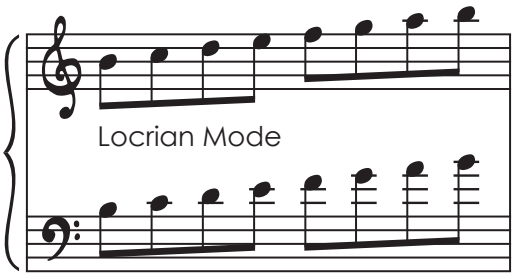
G 7



For Dominant Chord Improvisation, we use the 5th mode
of the major scale (mixolydian)

Example: If we see an C7 chord (we should know that C
is the 5th degree of a F Major Scale (1♭)
So a C7 Mixolydian scale has the same key signature
as F Major

B mi7(♭5)



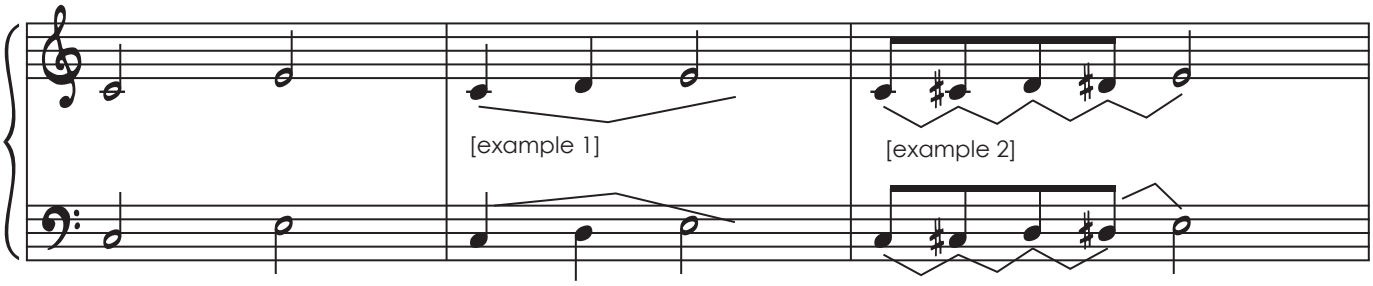
For Minor7♭5 Chord Improvisation, we use the 7th mode
of the major scale (Locrian)

Example: If we see an Dmi7♭5 chord (we should know that D
is the 7th degree of a E♭ Major Scale (3♭'s)
So a Dmi7♭5 Locrian scale has the same key signature
as E♭ Major

The chords related to the modes we talked about will make sense as we move through this handout. Before we start to understand and learn how to build chords, we need to understand a very important interval. That interval is the interval of a 3rd (major and minor). Chords are just intervals of 3rd stacked on top of each other.

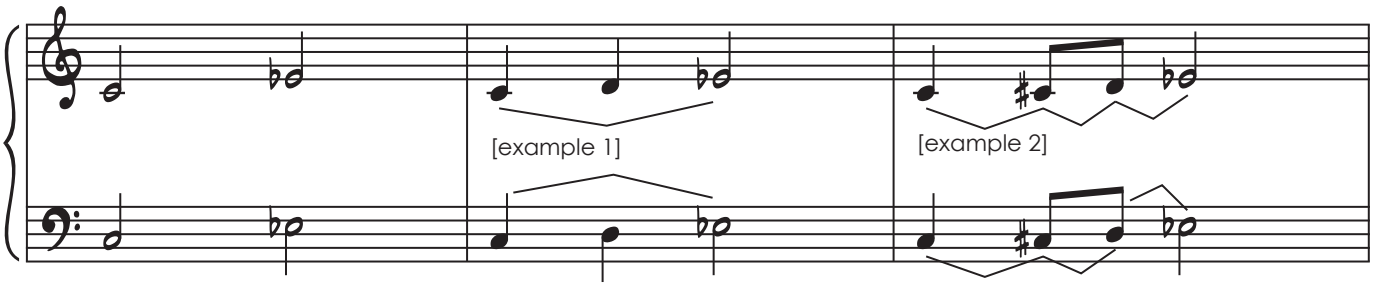
The first interval below is a Major 3rd. Why? because it's the 3rd note of a C major scale (see example 1)

We can also figure out the interval using 1/2 intervals (chromatic scale)
A Major 3rd interval will have 4 1/2 steps (see example 2)

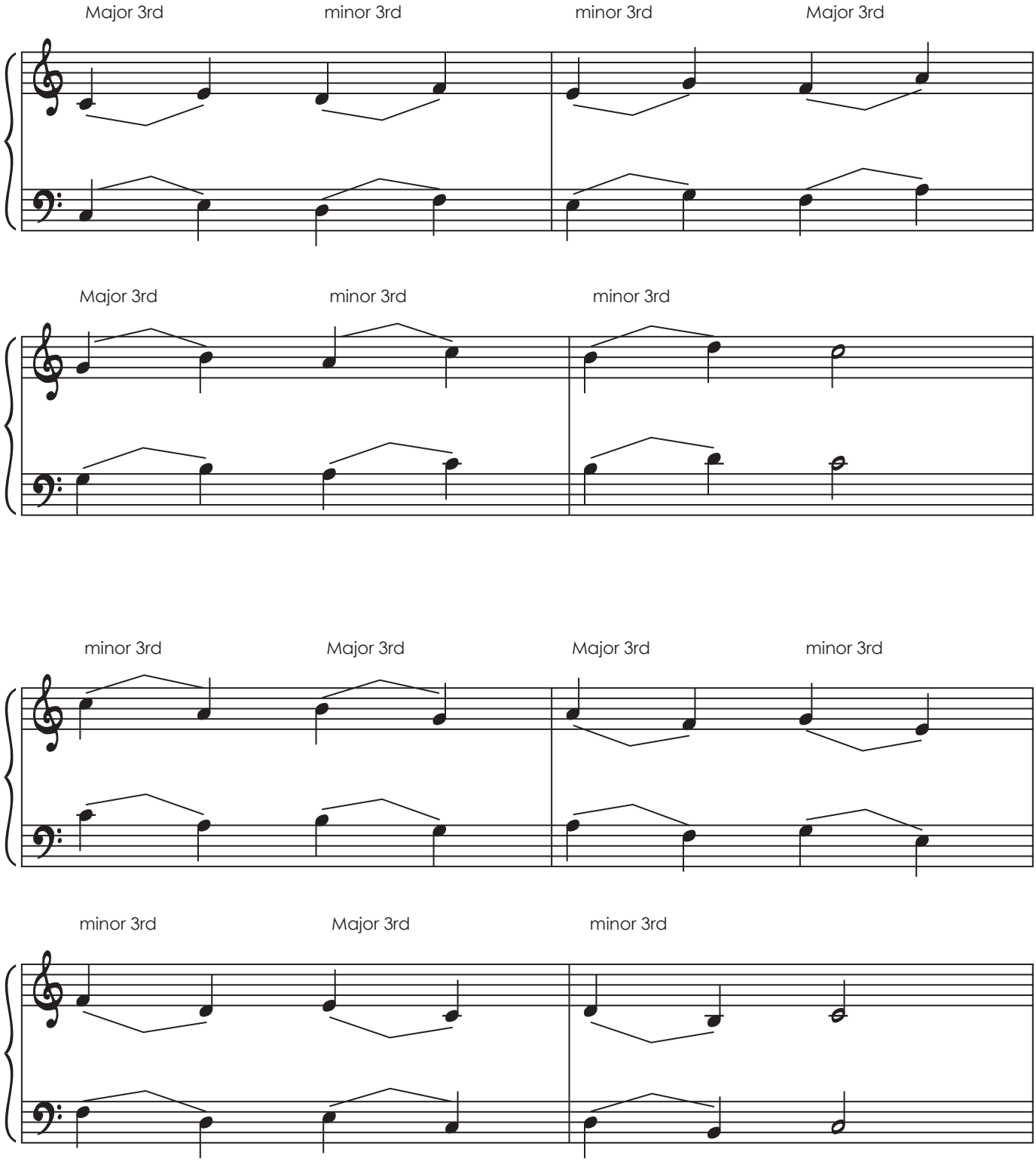


The next interval below is a minor 3rd. Why? because it's the 3rd note of a C minor scale (see example 1)

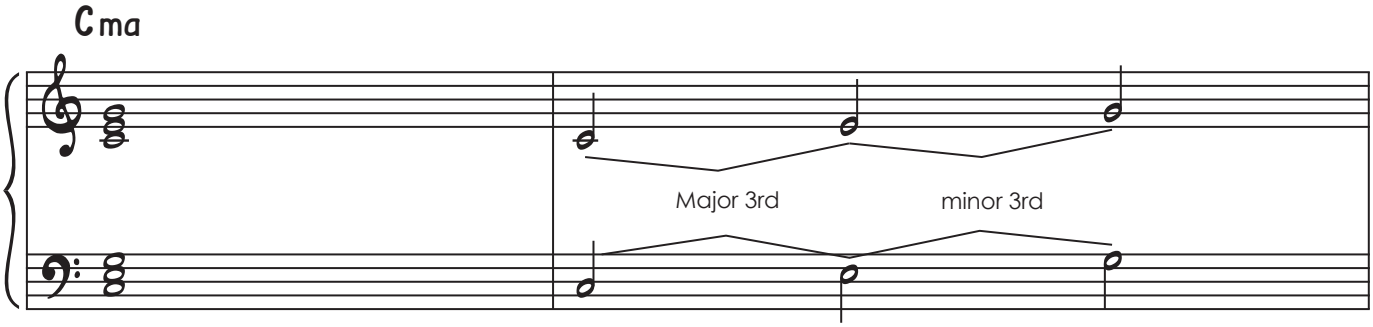
We can also figure out the interval using 1/2 intervals (chromatic scale)
A minor 3rd interval will have 3 1/2 steps (see example 2)



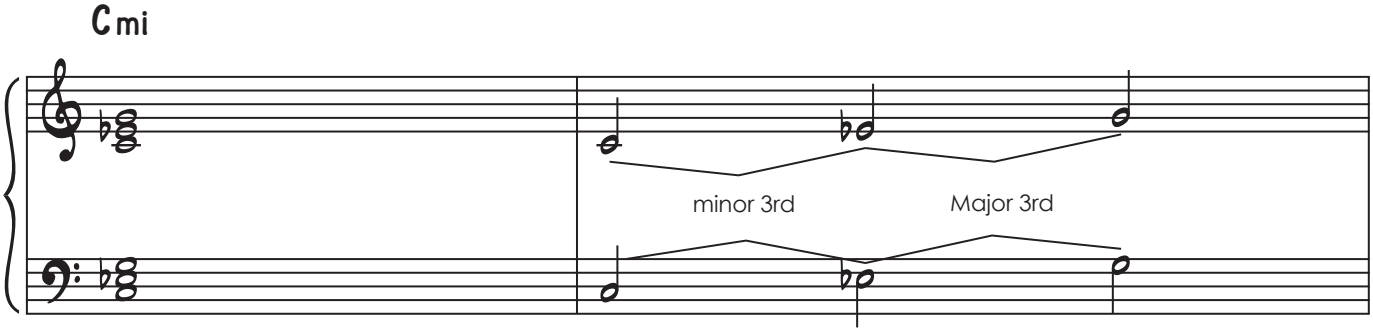
Now let's bulid diatonic 3rd's from every degree of the C Major scale. These will all consist of Major & minor 3rd's



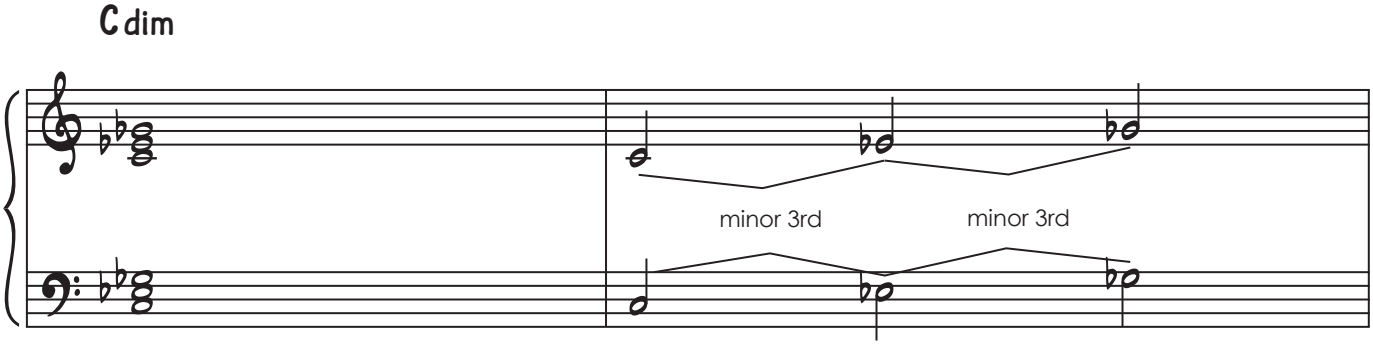
A **Major triad** is the root, 3rd, and 5th of a major scale, but let's look at it through the construction of stacking intervals of 3rd's.
A major triad is a major 3rd (C to E) with a minor 3rd on top (E to G)
Count the 1/2 steps



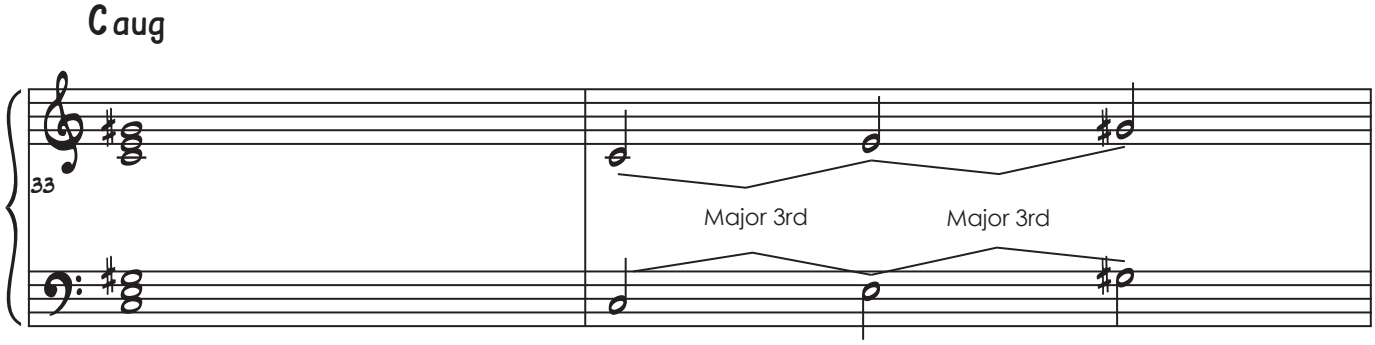
A **minor triad** is the root, 3rd, and 5th of a minor scale, but let's look at it through the construction of stacking intervals of 3rd's.
A minor triad is a minor 3rd (C to E♭) with a Major 3rd on top (E♭ to G)
Count the 1/2 steps



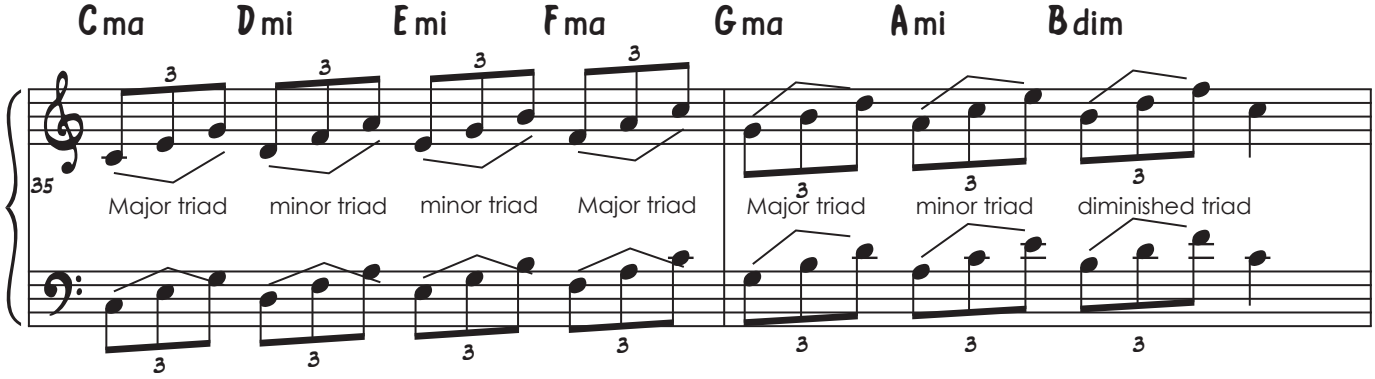
A **diminished triad** is the root, 3rd, and 5th of a diminished scale, but let's look at it through the construction of stacking intervals of 3rd's.
A diminished triad is a minor 3rd (C to E♭) with a minor 3rd on top (E♭ to G♭)
Count the 1/2 steps (could be thought of as a major triad with a ♭3 & ♭5)

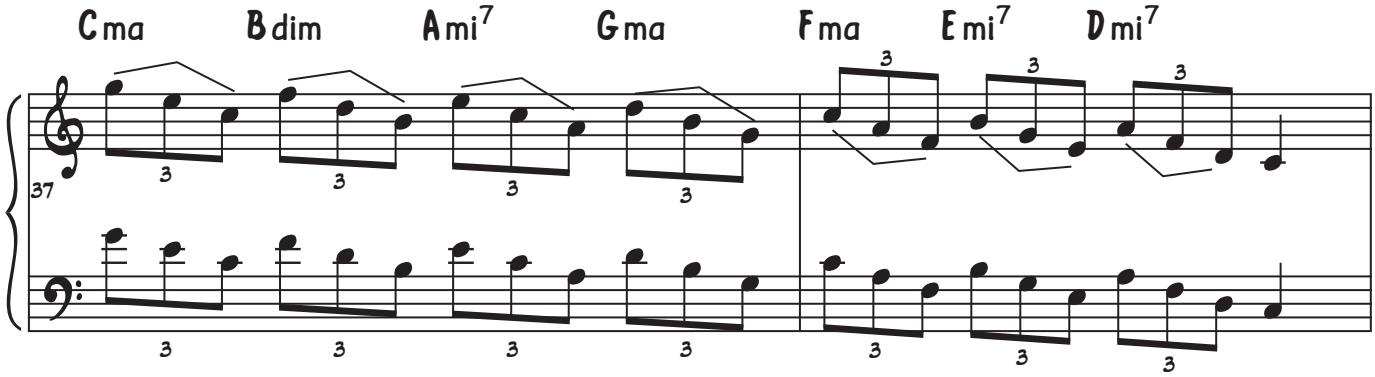


An **augmented triad** is the root, 3rd, and 5th of a wholetone scale, but let's look at it through the construction of stacking intervals of 3rd's.
An augmented triad is a Major 3rd (C to E) with a Major 3rd on top (E to G♯)
Count the 1/2 steps (could be thought of as a major triad with a ♯5)



Below are the triads that are bulit from every degree od the major scale. Learning these diatonic triads are essential foundational material and a key tool for improvisation.

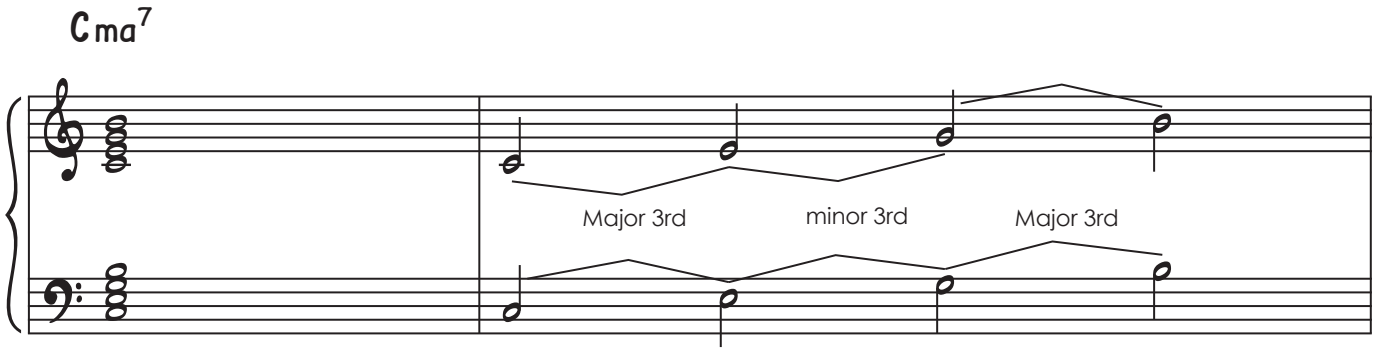




Having established some foundational material, we will now look at building more jazz related chords. For this, we will stack another note on top of the triad creating 7th chords (root, 3rd 5th, 7th)

Let's start with the Major 7th chord. A Major scale is what we will use to create this chord. let's look at it through the construction of stacking intervals of 3rd's.

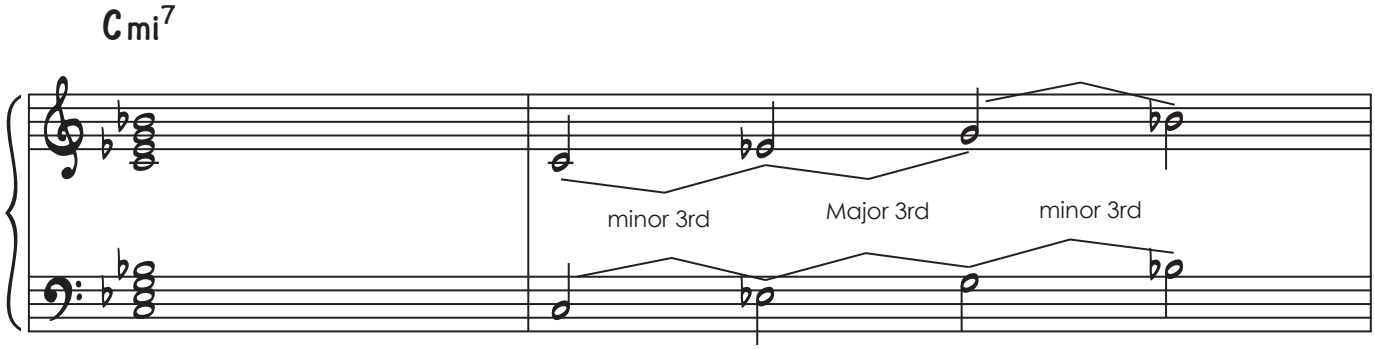
A **Major 7th chord** is scale degree 1,3,5,7 of the major scale.
The construction of stacked 3rd's are Major 3rd, minor 3rd, Major 3rd



Now the **minor 7th chord**. A dorian scale is what we will use to create this chord. let's look at it through the construction of stacking intervals of 3rd's.

A minor 7th chord is scale degree 1,3,5,7 of the dorian scale.
The construction of stacked 3rd's are minor 3rd, Major 3rd, minor 3rd

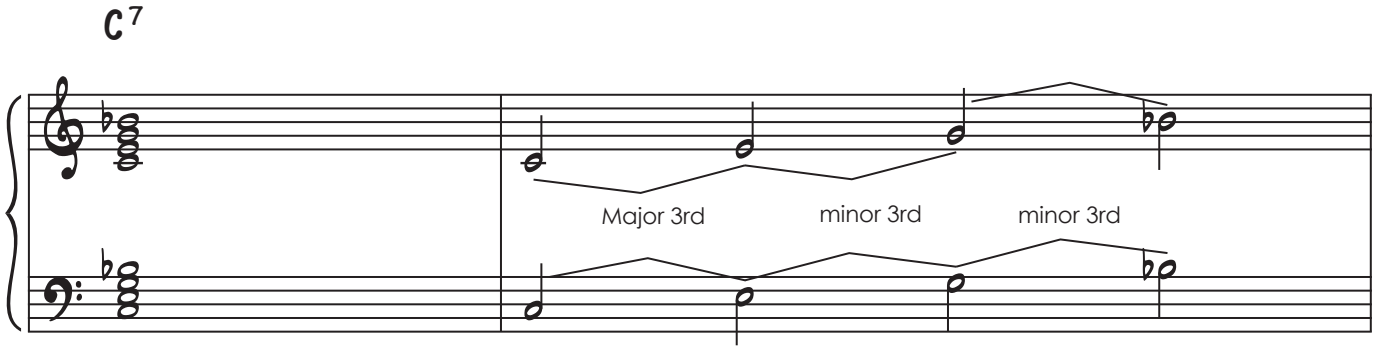
Remember that dorian is built from the 2nd degree of the major scale so Cmi7 shares the key signature of B♭ Major



Now the **dominant 7th chord**. A mixolydian scale is what we will use to create this chord. let's look at it through the construction of stacking intervals of 3rd's.

A dominant 7th chord is scale degree 1,3,5,7 of the mixolydian scale.
The construction of stacked 3rd's are Major 3rd, minor 3rd, minor 3rd

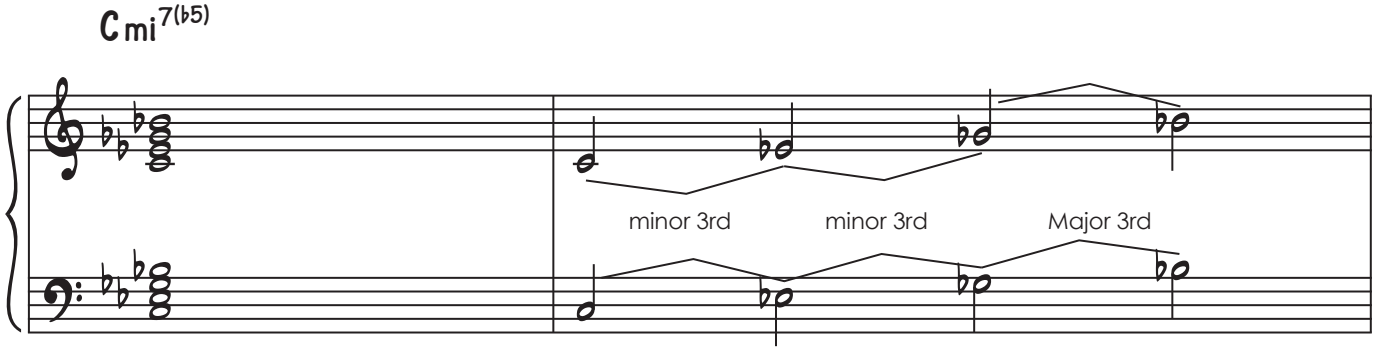
Remember that mixolydian is built from the 5th degree of the major scale so C7 shares the key signature of F Major



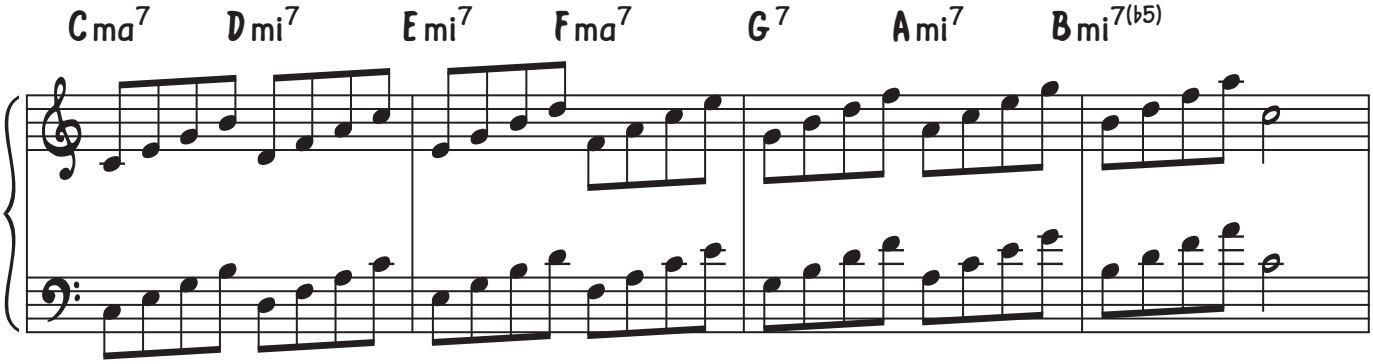
Now the **half diminished 7th chord (minor 7♭5)**. A locrain scale is what we will use to create this chord. Let's look at it through the construction of stacking intervals of 3rd's.

A half diminished 7th chord is scale degree 1,3,5,7 of the locrain scale.
The construction of stacked 3rd's are minor 3rd, minor 3rd, Major 3rd

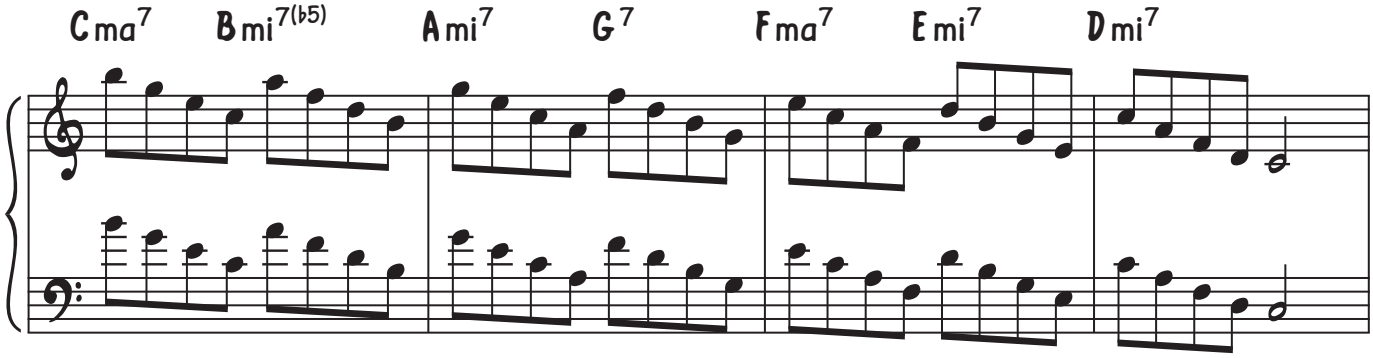
Remember that locrain is built from the 7th degree of the major scale so Cmi7♭5 shares the key signature of Db/C# Major



Below is all the diatonic 7th chords that are built from every degree of the C Major scale.

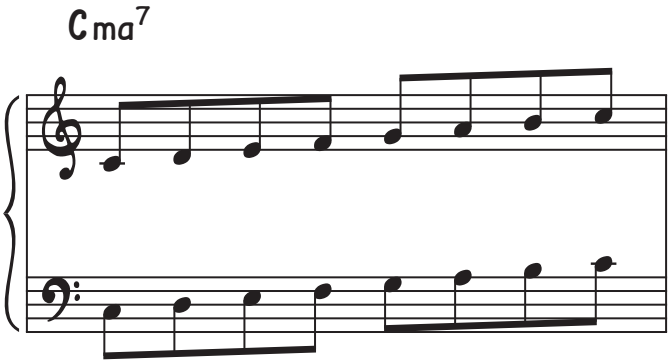


Descending 7th chords (much more difficult to do because you're not starting on the root of every chord



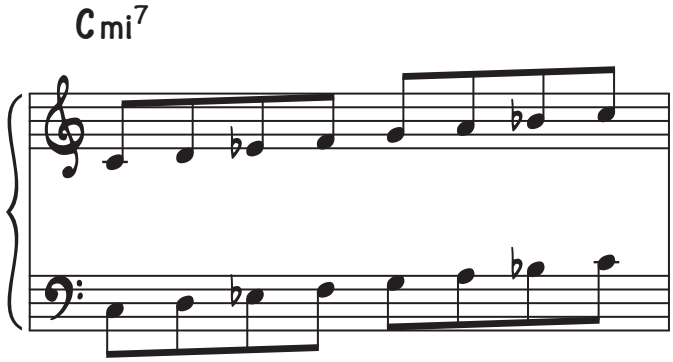
Building scales from the same root.

It's essential to know the modes of the major scale, but it's also important to learn how to create all the these scale types off of the same root. This will require a solid foundation of the major scale.



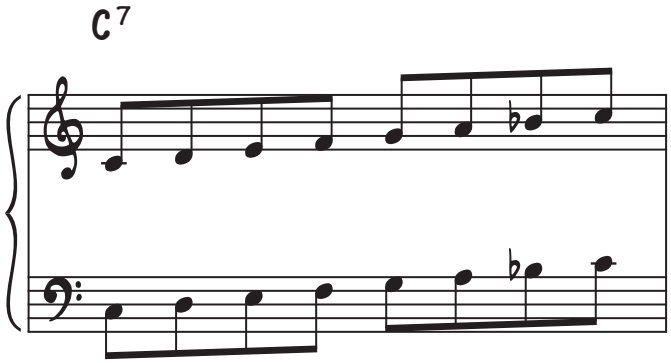
C Major Scale

The foundation scale.



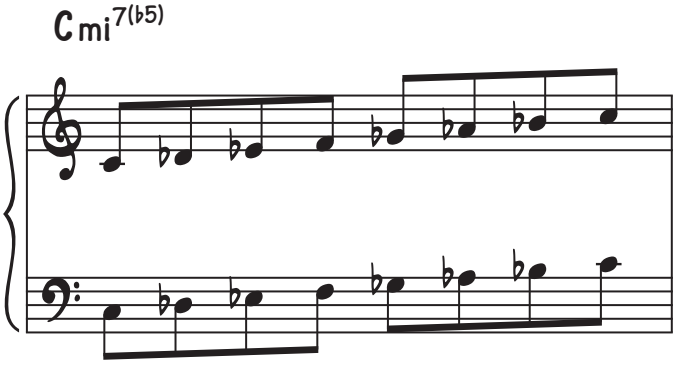
The C Dorian minor scale:

Take the C major scale and lower the 3rd & 7th degree by a 1/2 step



The C Mixolydian scale:

Take the C major scale and lower 7th degree by a 1/2 step



The C Locrain minor scale: (The most difficult)

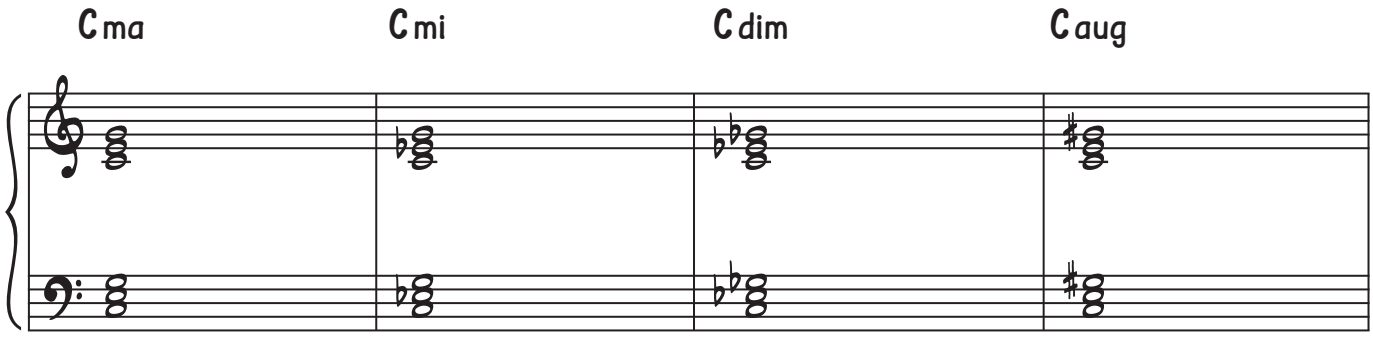
Take the C major scale and lower the 2nd, 3rd, 5th 6th & 7th degree by a 1/2 step

Creating triads:

We have looked at creating chords by understanding intervals of 3rd's with the understaning of what scale degree's those chord are built from. Let's quickly look and another way to create triads and 7th chords.

This will all be based on your understanding of the Major triad. Based off the major triad we can convert is to the other 3 triads

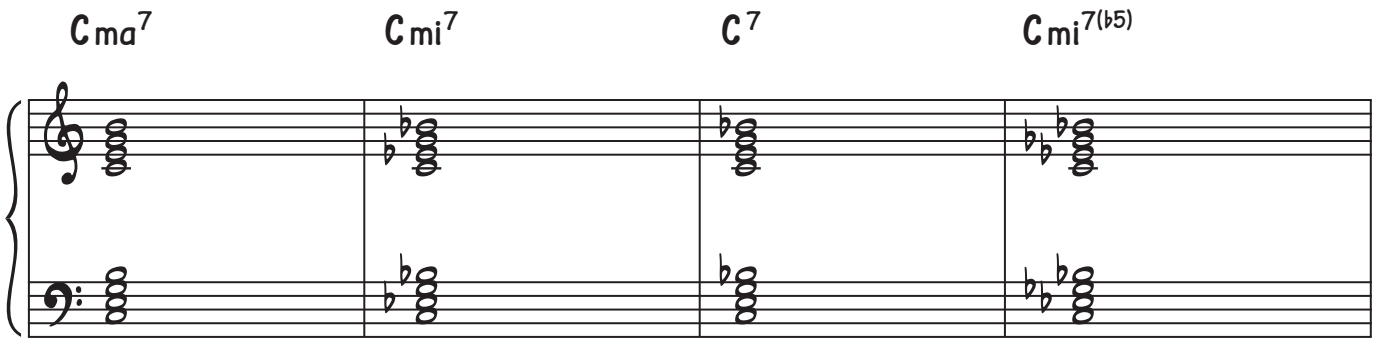
* Major triad uses 1-3-5 of the major scale
* To create a minor triad the 3rd degree of the major triad is lowered by a 1/2 step
* To create a diminished triad the 3rd and 5th degree of the major triad is lowered by a 1/2 step
* To create an augmented triad the 5th degree of the major triad is raised by a 1/2 step



Creating 7th chords

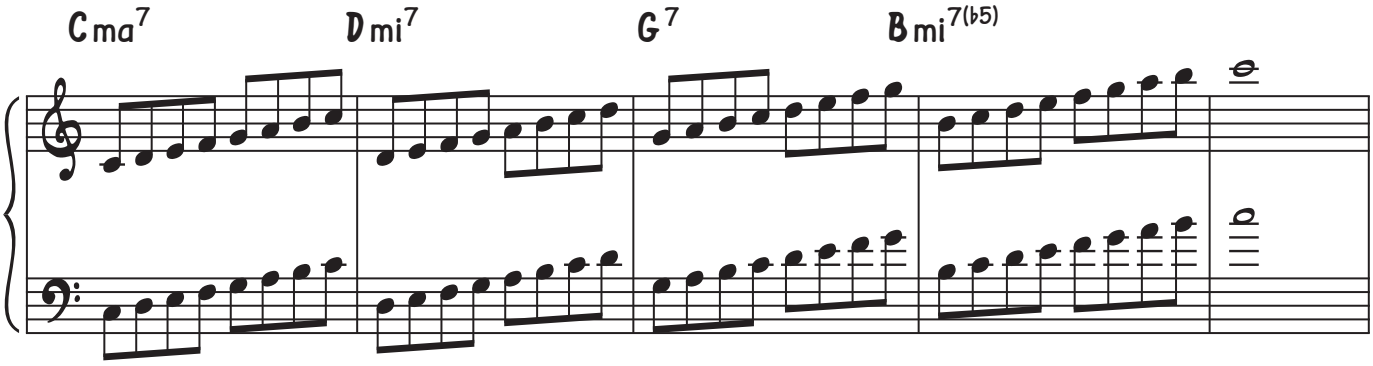
This will all be based on your understanding of the Major 7th chord. Based off the major7 chord, we can convert is to the other 3 7th chord types.

* Major 7th uses 1-3-5 7 of the major scale
* To create a minor 7 chord the 3rd and 7th degree of the major 7th is lowered by a 1/2 step
* To create a dominant 7 chord the 7th degree of the major 7th is lowered by a 1/2 step
* To create a half diminished chord the 3rd, 5th and 7th degree of the major 7th chord is lowered by a 1/2 step

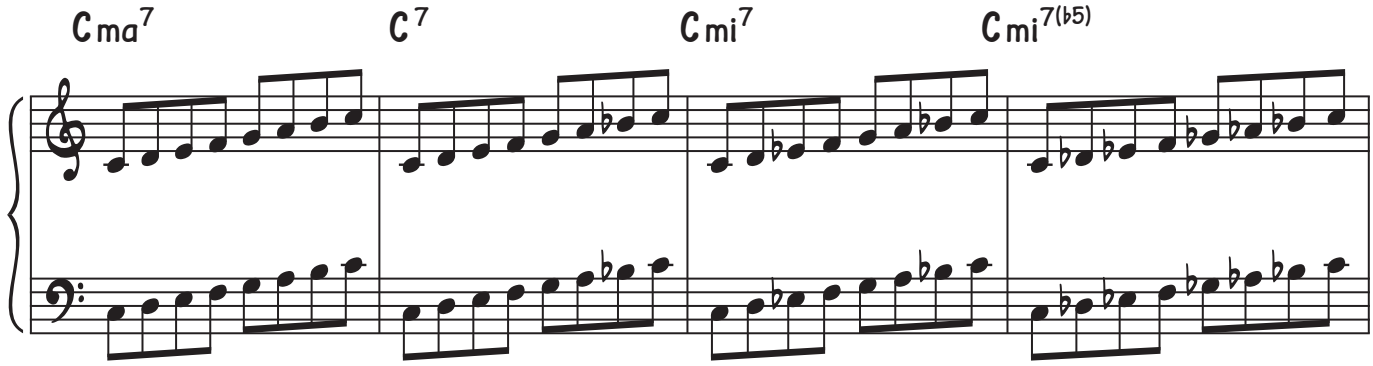


Here are some ways to practice your jazz scales

#1 - Pick a key and play the essential modes of of that scale
* mode 1 Major (example C major)
* mode 2 Dorian (example D Dorian)
* mode 5 mixolydian (example G mixolydian)
* mode 7 Locrian (example B Locrain)

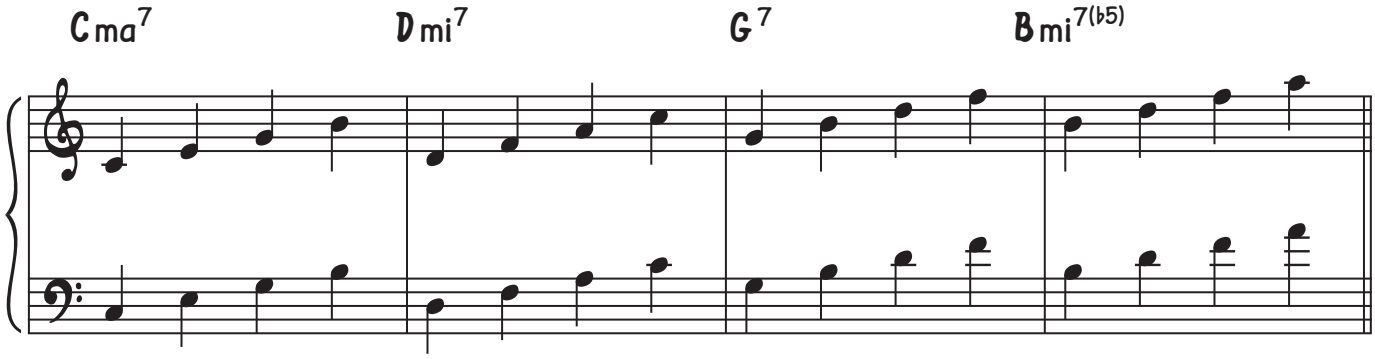


#2 - Pick a root and play all the modes off of that root
* Major mode (example C major)
* Mixolydian mode (example C mixolydian)
* Dorian mode (example C Dorian)
* Locrian mode (example C Locrain)

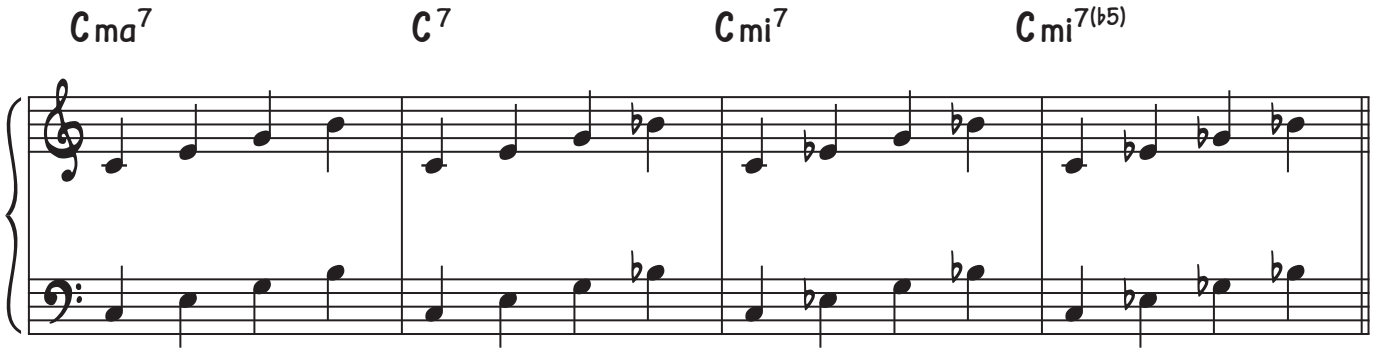


The same thing we did with scales can now be applied to chords:

#1 - Pick a key and play the essential chords of that scale
* Major (example C major)
* Minor (example D Dorian)
* Dominant (example G mixolydian)
* Minor7♭5 (example B Locrain)



#2 - Pick a root and play all the modes off of that root
* Major mode (example C major)
* Dominant (example C mixolydian)
* Minor (example C Dorian)
* Minor7♭5 (example C Locrain)



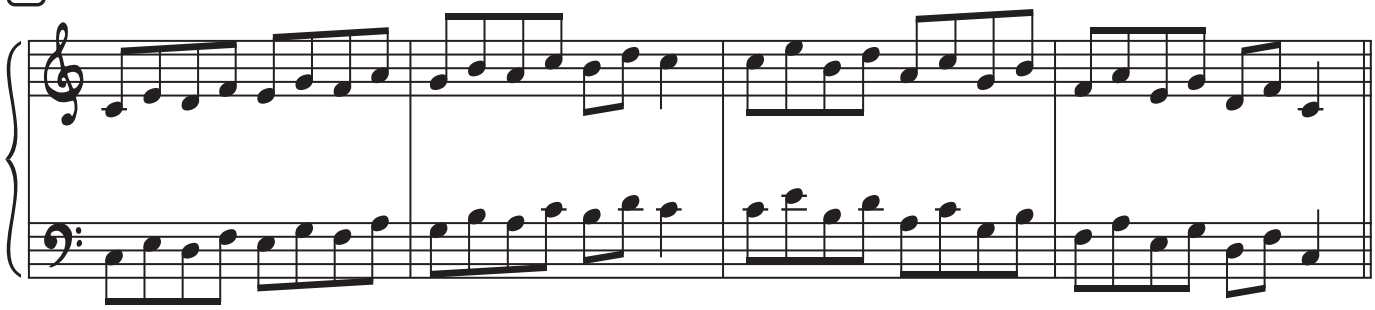
3rd's

Turning these basic tools into improvisational material.

Let's start with the diatonic 3rd intervals

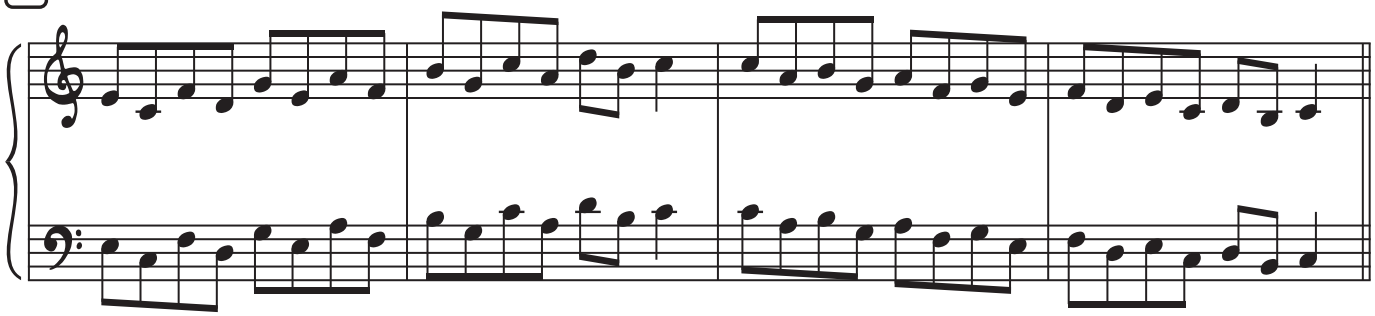
Exercise #1 is the basic 3rd interval (the interval is **ascending**), built through the modes of a major scale (every scale degree)

1



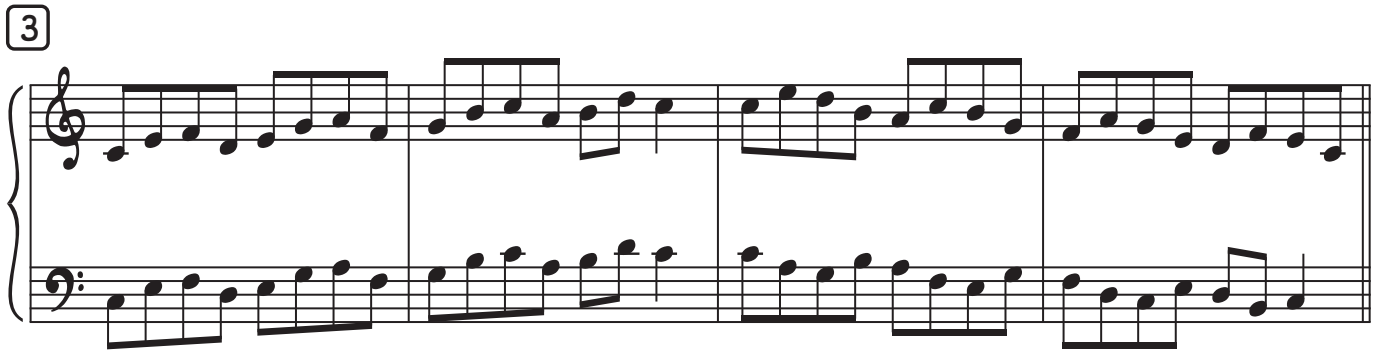
Exercise #2 is the basic 3rd interval (the interval is **descending**), built through the modes of a major scale (every scale degree)

2

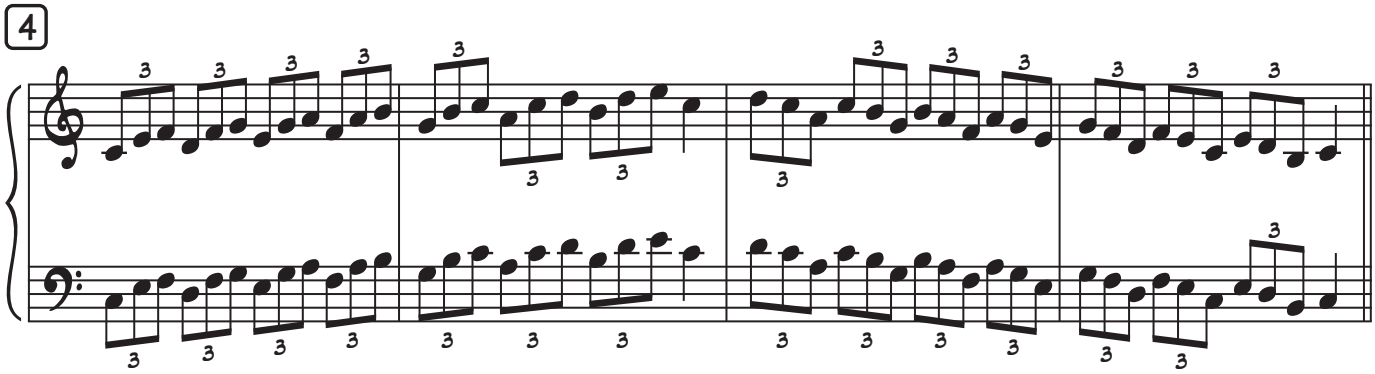


Exercise #3 is the basic 3rd interval (the interval is alternating one **ascending** one **descending**), built through the modes of a major scale (every scale degree)

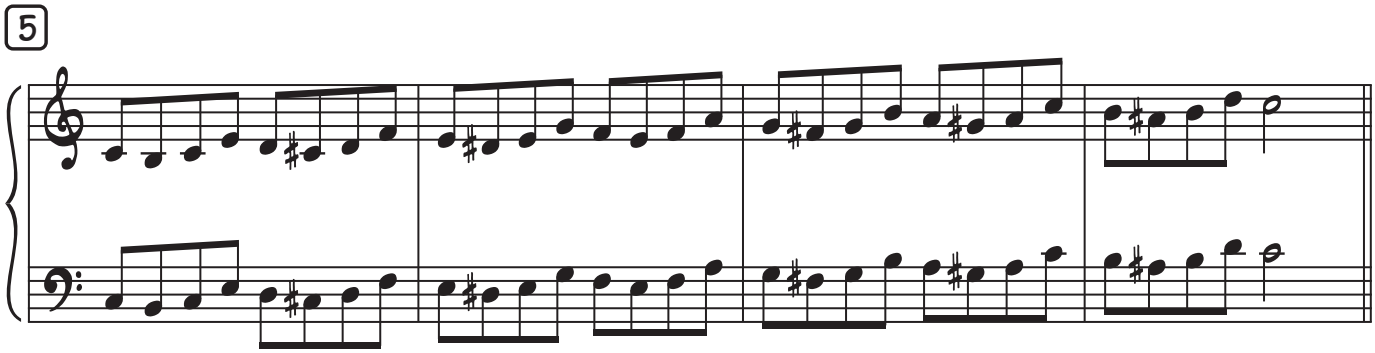
3



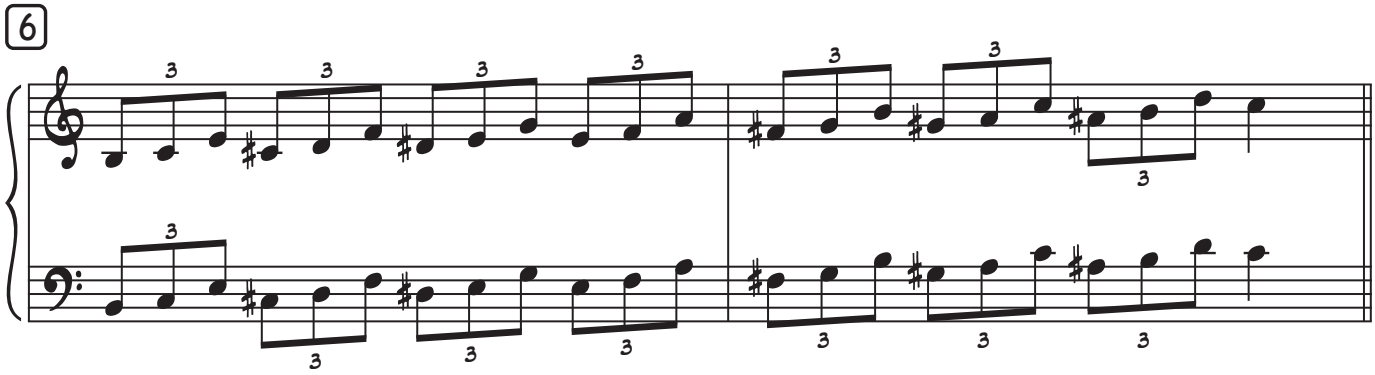
Exercise #4 is the basic 3rd interval (the interval **ascending with a scale step on top)** built through the modes of a major scale (every scale degree)



Exercise #5 is the basic 3rd interval with chromatic notes (the pattern starts on the scale note, descends a 1/2 step, returns to starting note, then up a 3rd)



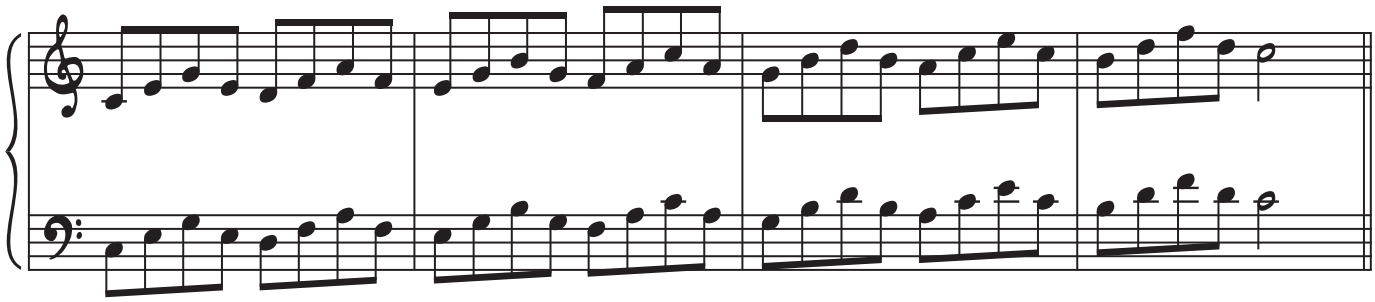
Exercise #6 is the basic 3rd interval with a 1/2 step approach to each 3rd pattern



Triads

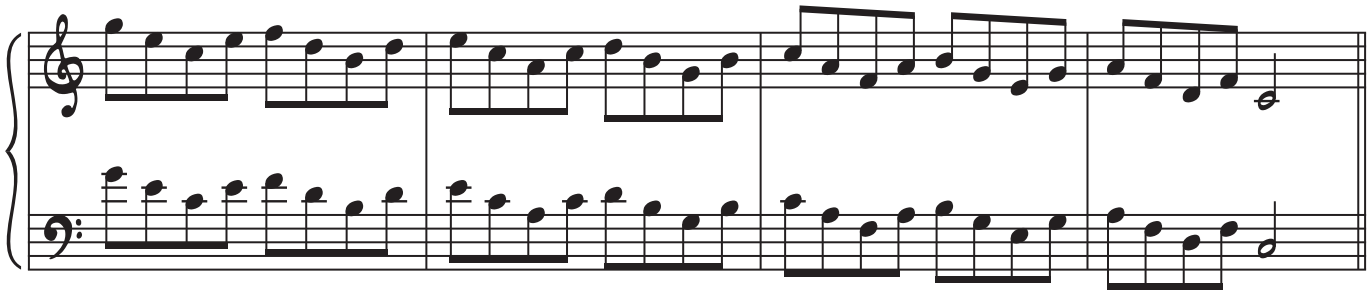
Exercise #7 is the basic triad pattern with one note repeated (1-3-5-3)

7



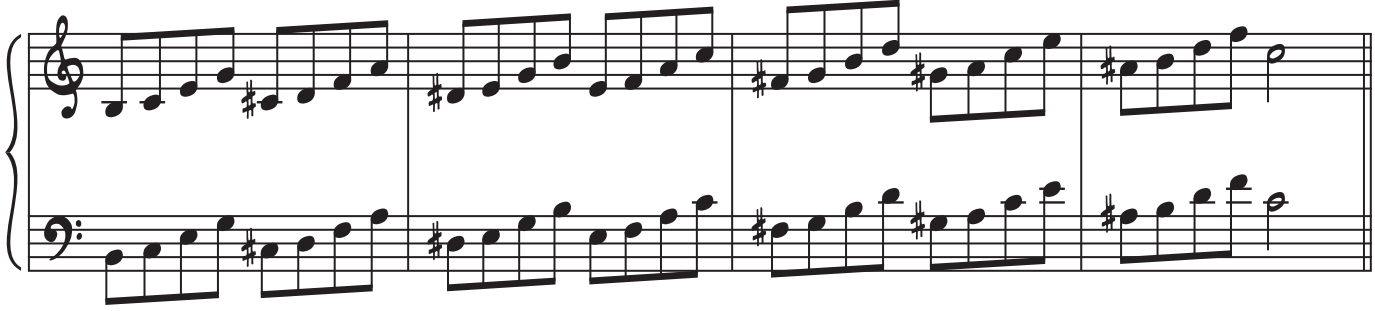
Exercise #8 is the reverse of exercise #7 (5-3-1-3)

8



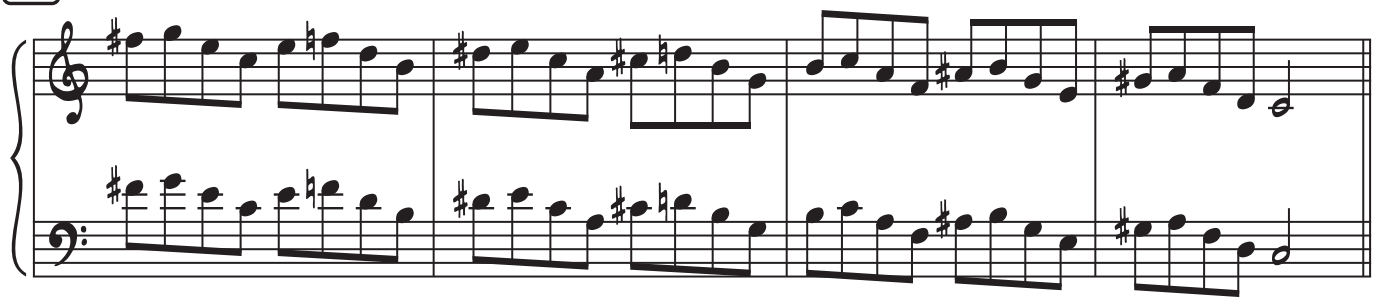
Exercise #9 adds chromatic notes. This is the basic triad (1-3-5-) with a 1/2 step approach from below to the start of each triad

9



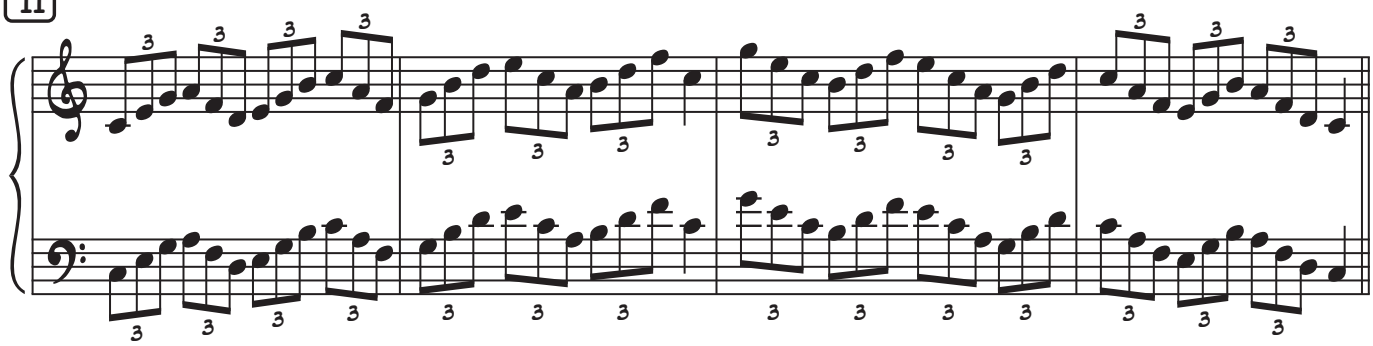
Exercise #10. This is the basic triad (descending 5-3-1) with a 1/2 step approach from below to the start of each descending triad

10



Exercise #11 is the basic triad in alternating order. One triad ascending (1-3-5) the next triad descending (5-3-1)

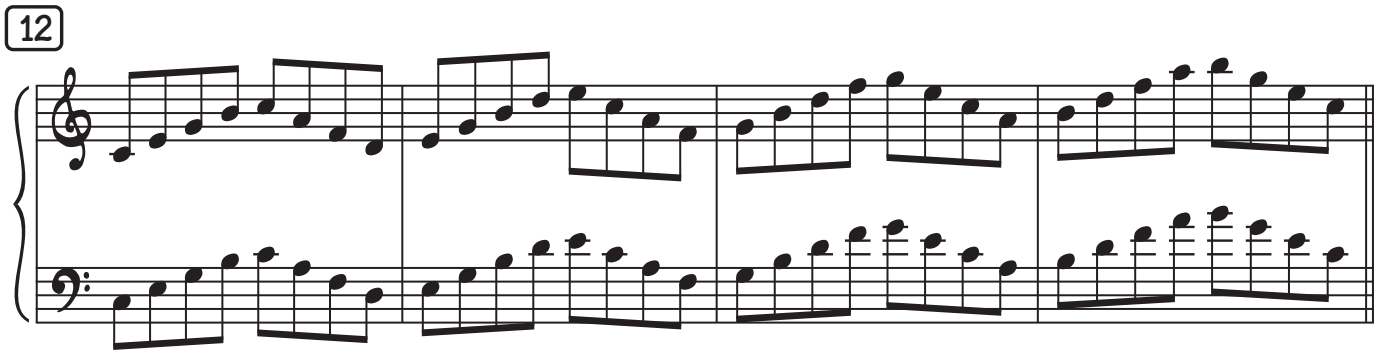
11



7th Chords

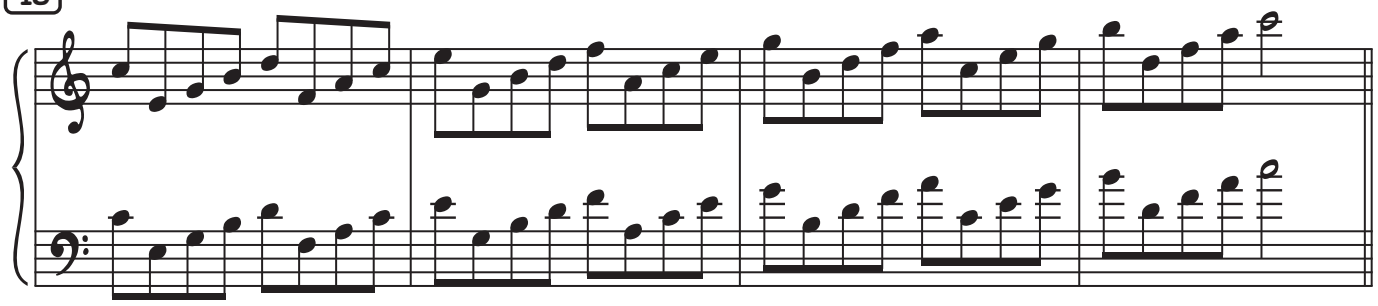
Exercise #12 are 7th chords in alternating order. One 7th chord ascending (1-3-5-7) the next 7th chord descending (7-5-3-1)

12



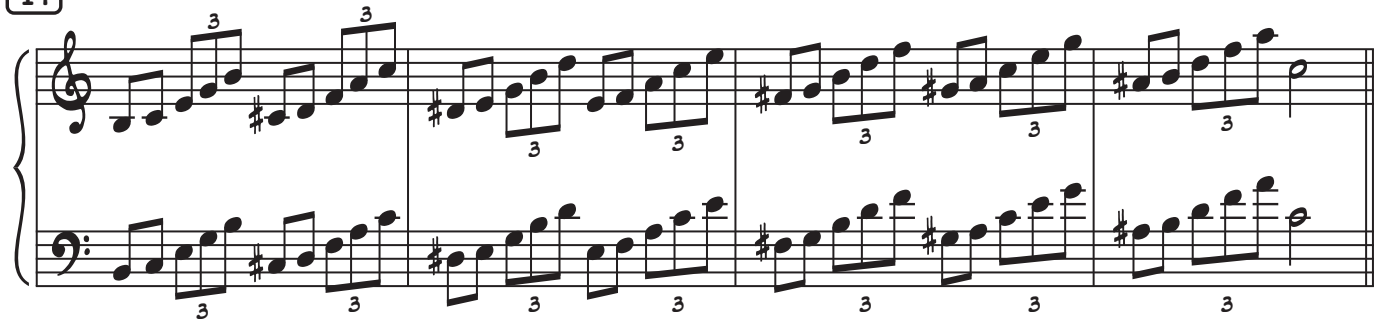
Exercise #13 are 7th chords with the staring note move up a octave. The pattern is still 1-3-5-7, but the octave is displaced. This is a common shape found in the bebop era.

13



Exercise #14 is another common shape found in the bebop era.
This exercise uses the 7th chord arpeggio (1-3-5-7) with a 1/2 step approach from below each chord.
Notice the triplet rhythm. bebop phrases use the rhythmic pattern often.

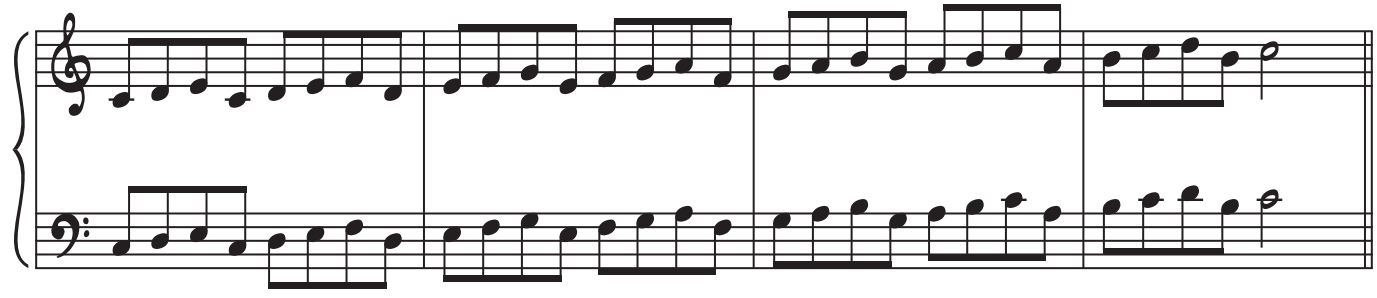
14



Additional Scale Patterns

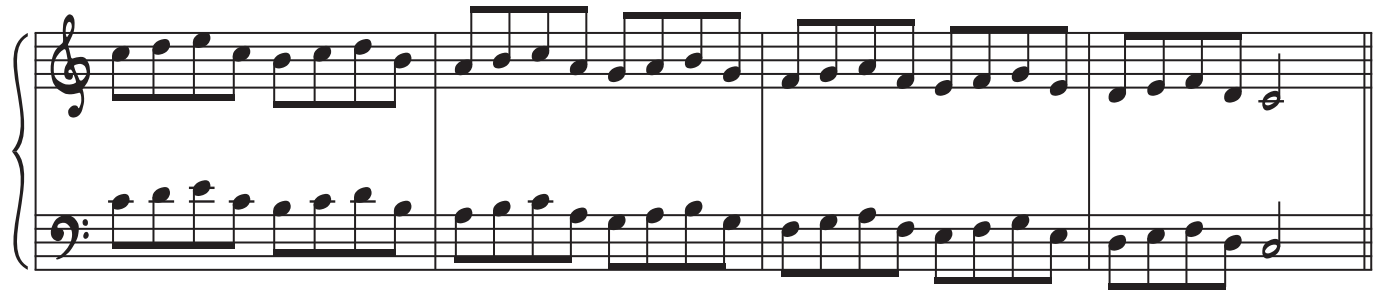
Exercise #15 is a scale shape that play's up three notes of the scale and skips down a 3rd to the note we started on. (1-2-3-1)

15



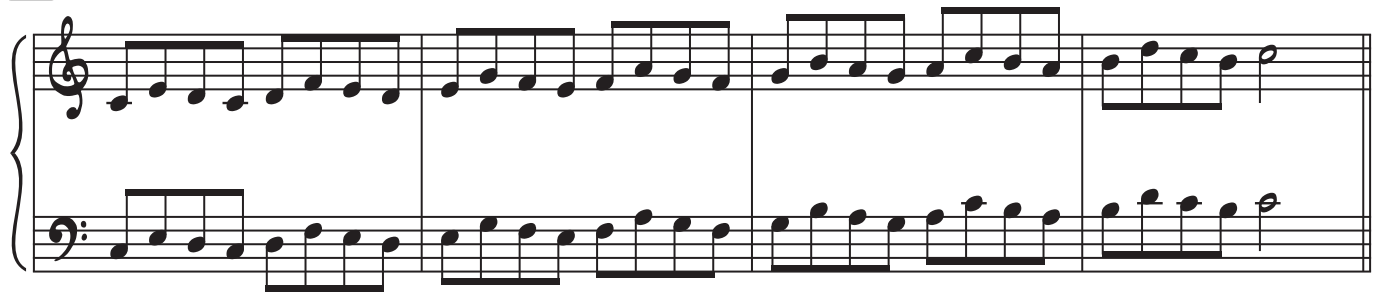
Exercise #16 is a descening version of #15

16



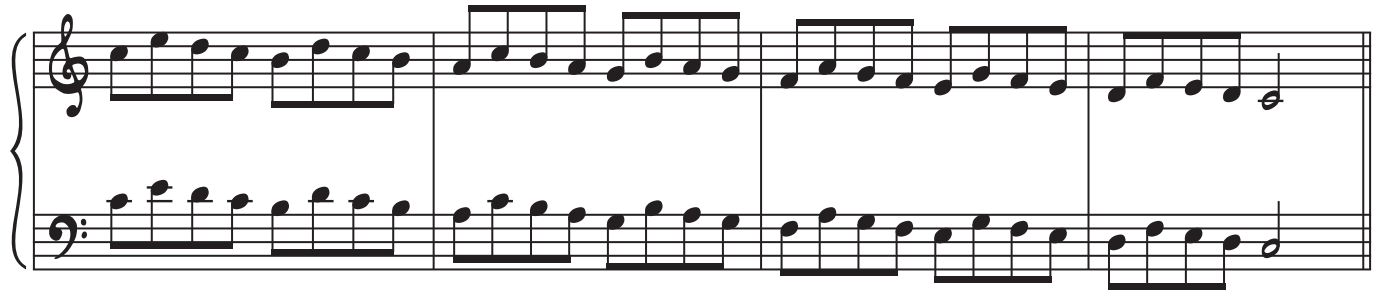
Exercise #17 is a variation of #15. Up a 3rd followed by scale motion. (1-3-2-1)

17



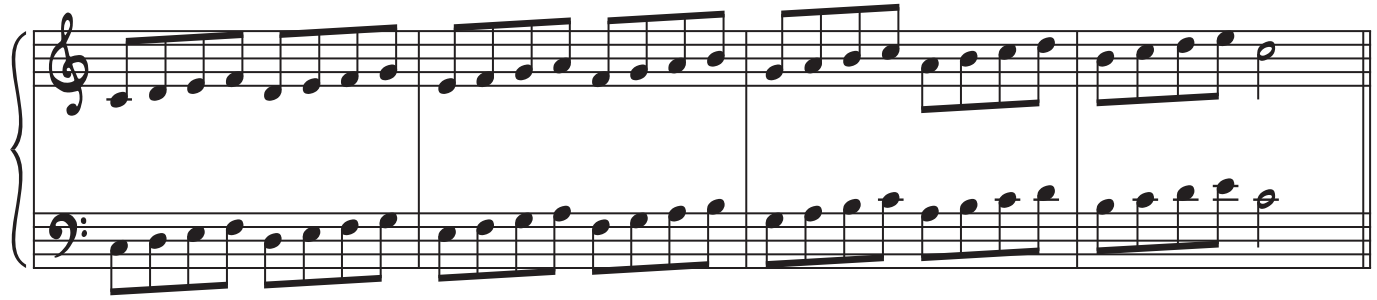
Exercise #18 is a descening version of #17

18



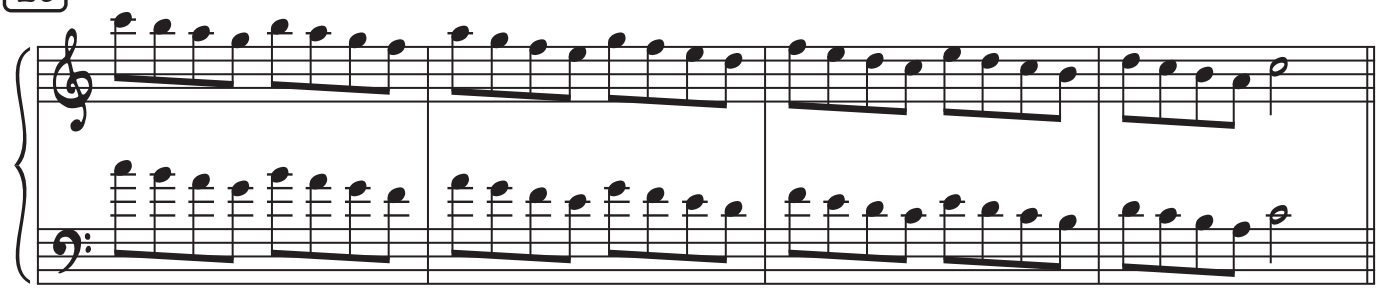
Exercise #19 is a four note ascending scale motion shape (1-2-3-4)

19



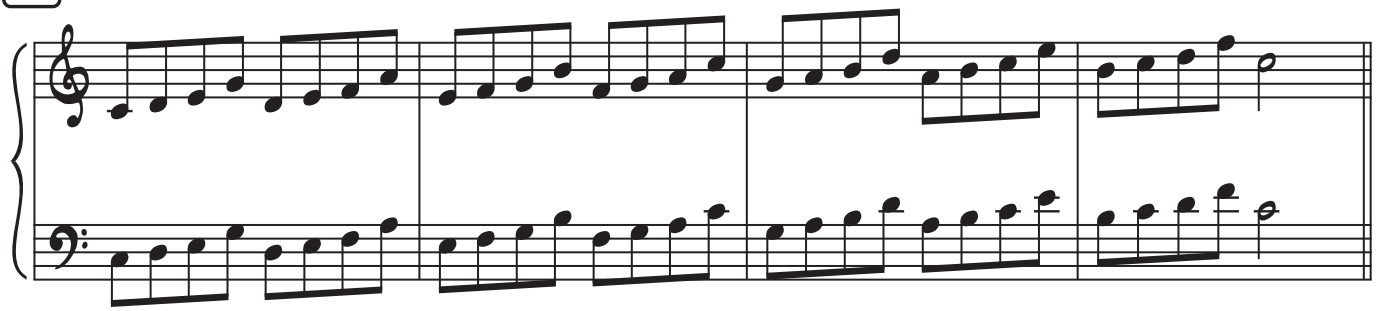
Exercise #20 is a four note descending scale motion shape based off of #19

20



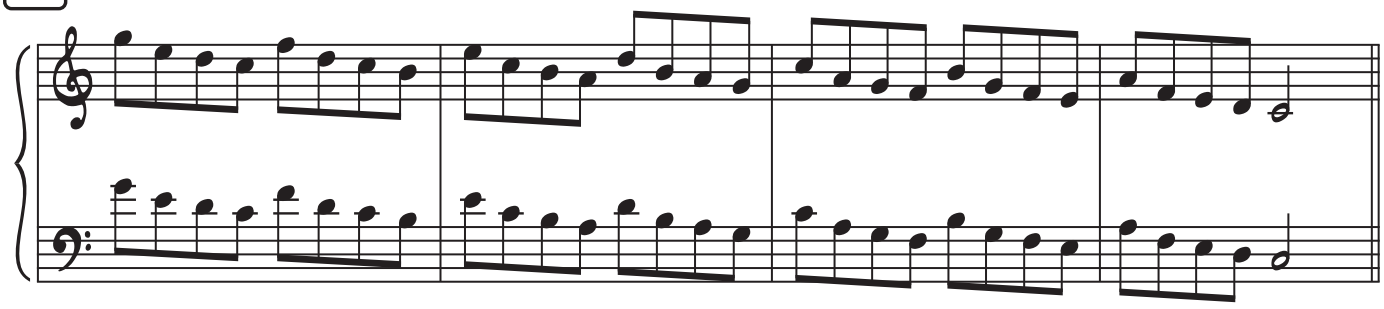
Exercise #21 is a four note ascending scale shape. Up 3 scale notes with a skip of a 3rd at the end (1-2-3-5)

21



Exercise #22 is a four note descending scale shape. skip down of a 3rd followed by scale motion (5-3-2-1)

22



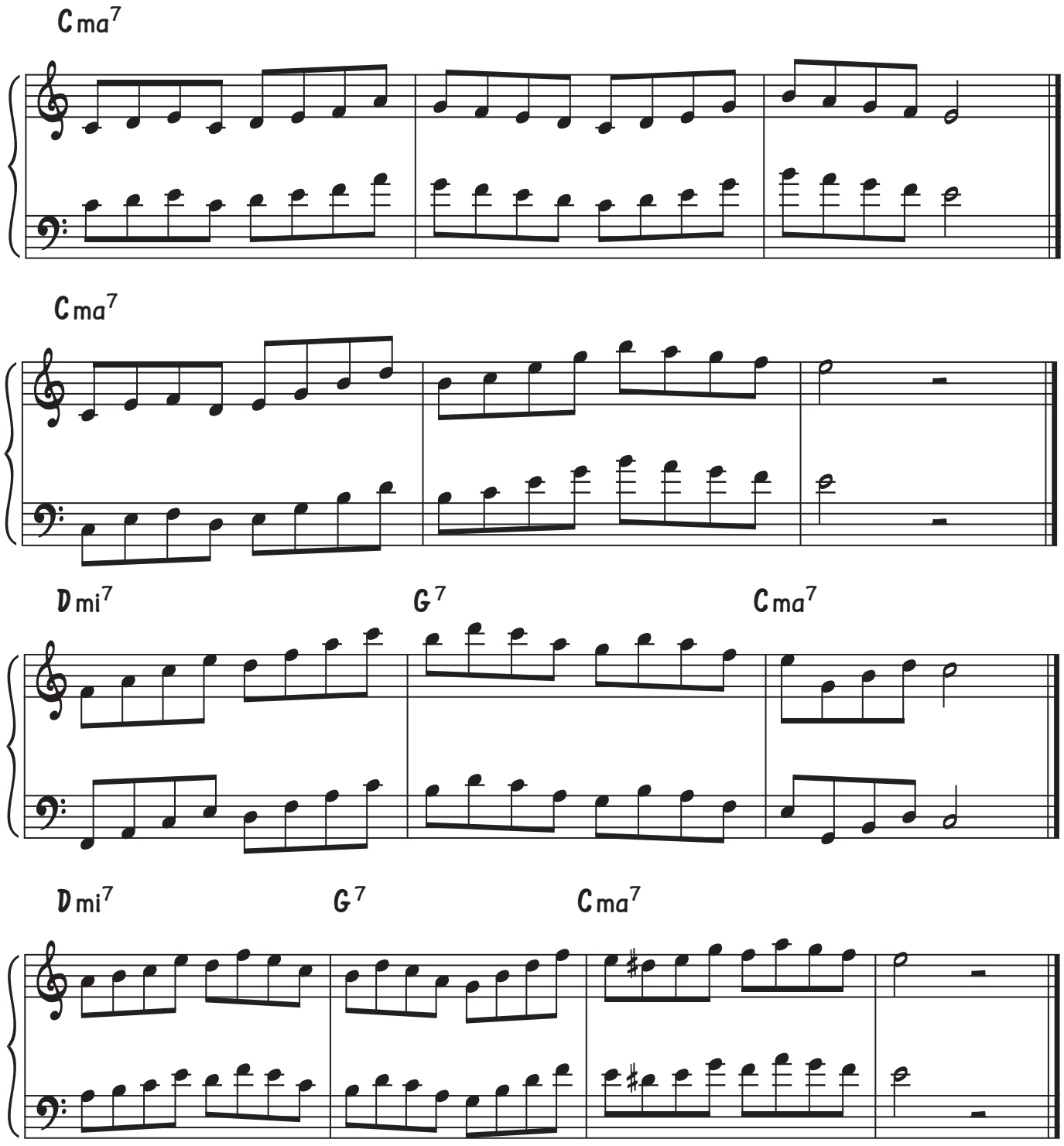
Remember these 22 patterns were written over C Major, but these same patterns apply to the other 3 modes we're focusing on (Dmi7, G7, Bmi7♭5).

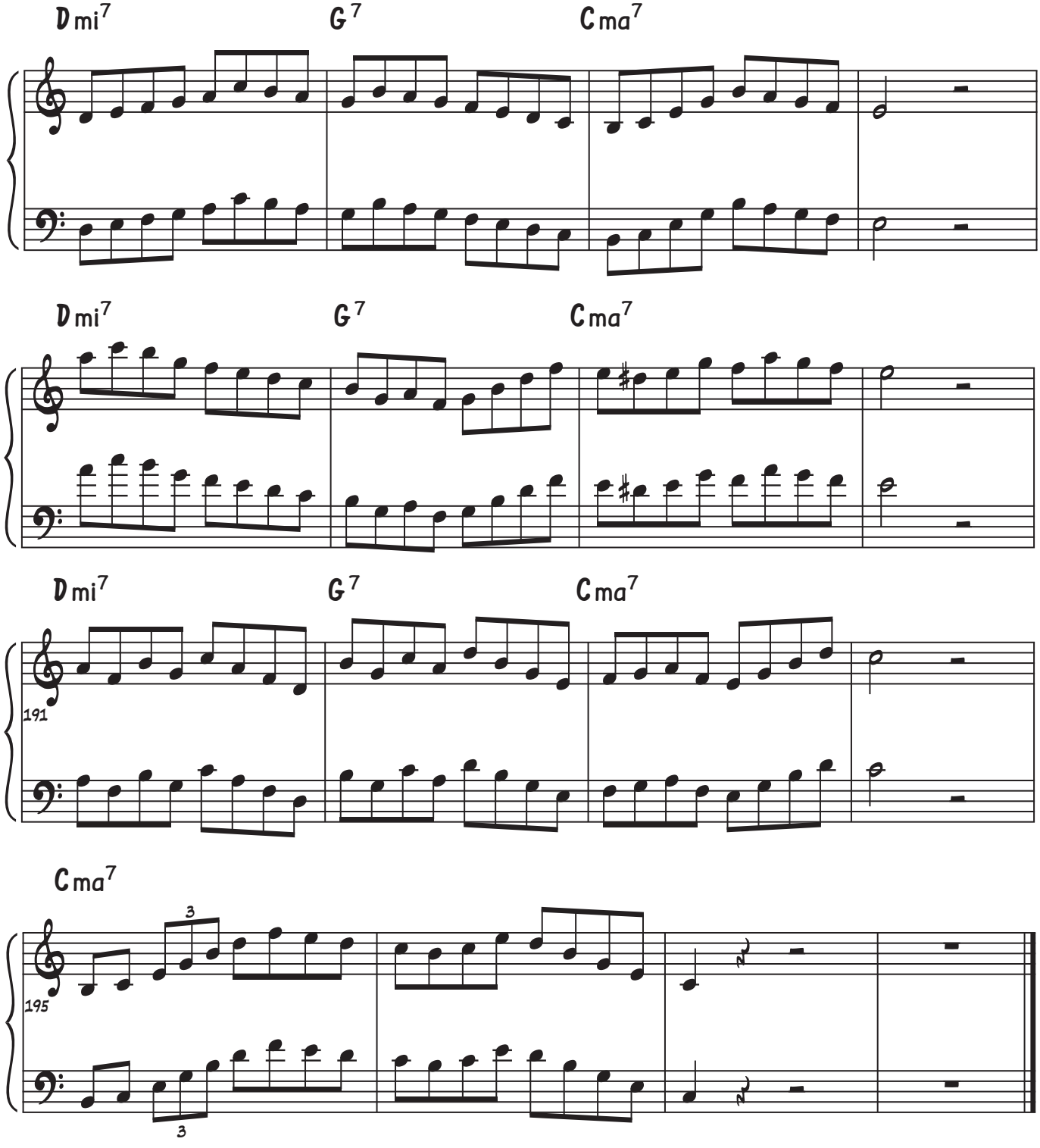
There key to scale pattern application is targeting notes that are linked to the specific chord. Meaning that chords primary chord tones (1-3-5-7) of that chord

CMa7: - C - E- G - B
G7: G - B - D - F
Dmi7: D- F - A - C
Bmi7♭5: B- D - F - A

These are the notes we want to target on beats 1 & 3 of the measure. It won't always apply, but the should always be a chord tone on 1 or 3 if not both. So the C major patterns will work over Dmi7 simply by putting the chord tones of Dmi7 of strong beats

Examples of Building Lines




Dmi7
G7
Cma7
Dmi7
G7
Cma7
Dmi7
G7
Cma7
191
Cma7
3
195
3

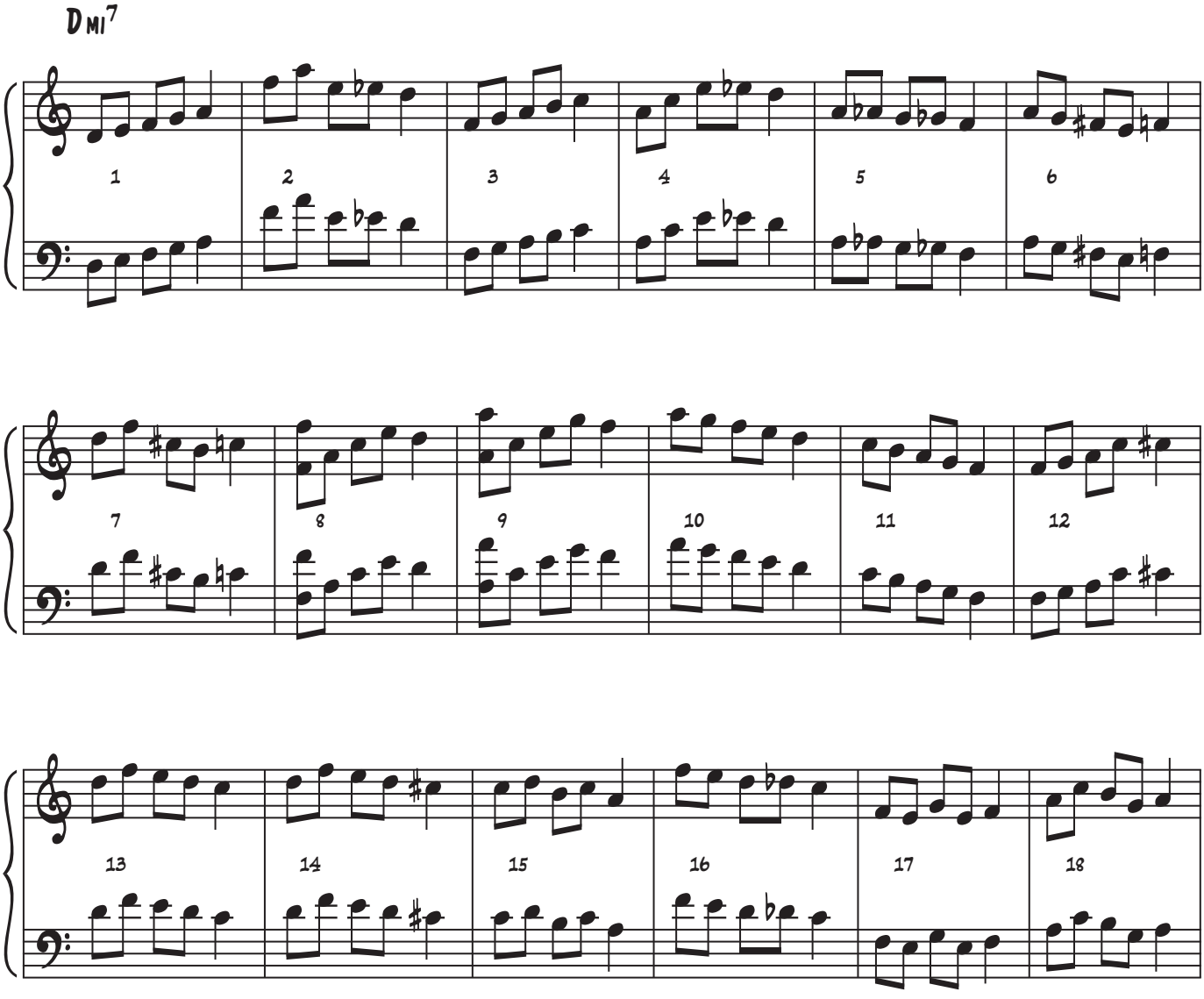
Creating ii-7 V7 I lines

Jeff Ellwood
Mt. San Antonio College

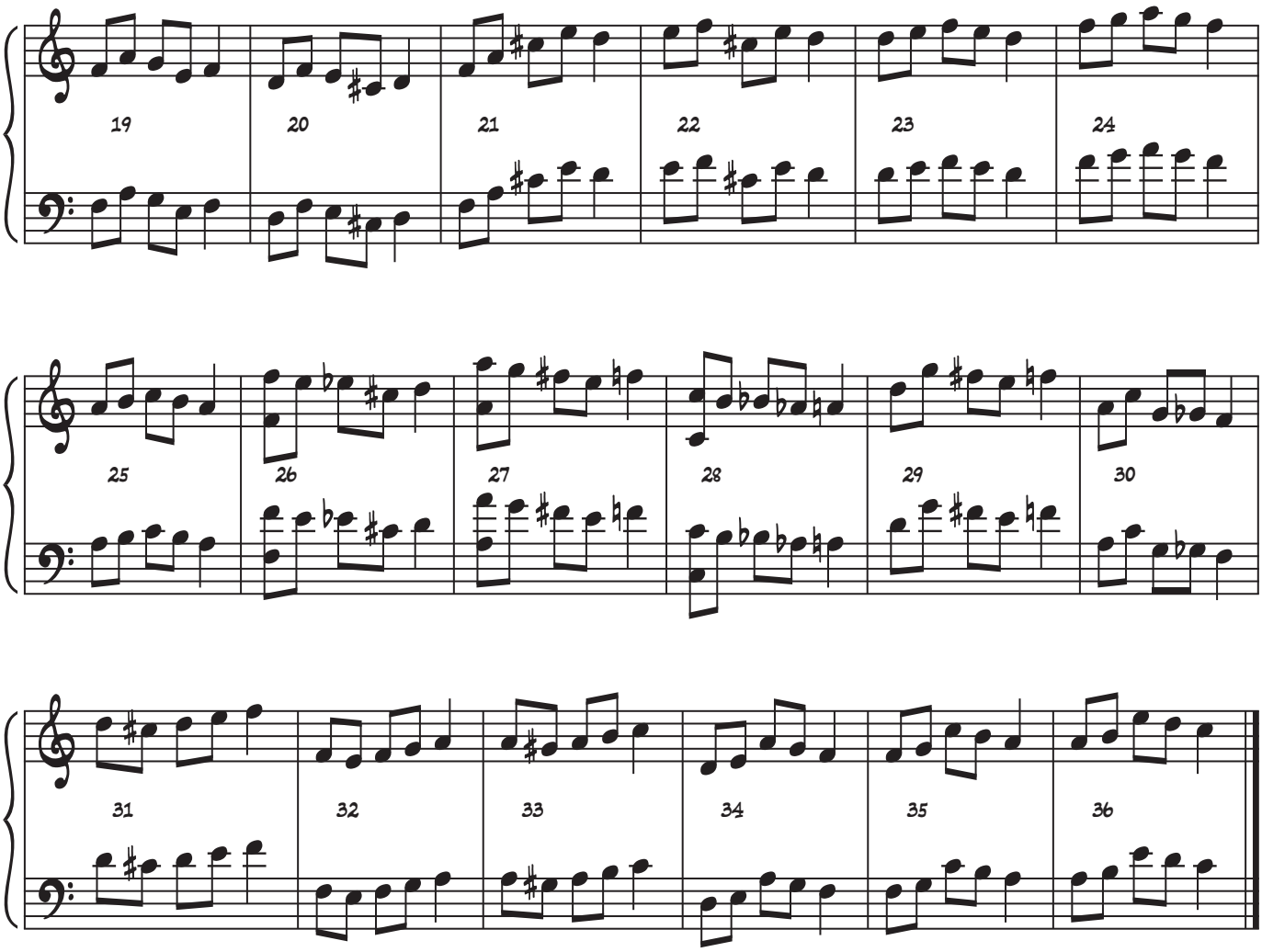
These exercises will deal with the ii-7 V7 I progression. I have come up with building blocks for beats 1 & 2 and beats 3 & 4 of each measure. Each block will connect to a chord tone (1-3-5-7). The quarter note at the end of each block is the connecting note in the next block. (the quarter note represents the starting note of the following block)

Note: all blocks can be moved an octave up or down to fit the line. Every block should connect by by step.

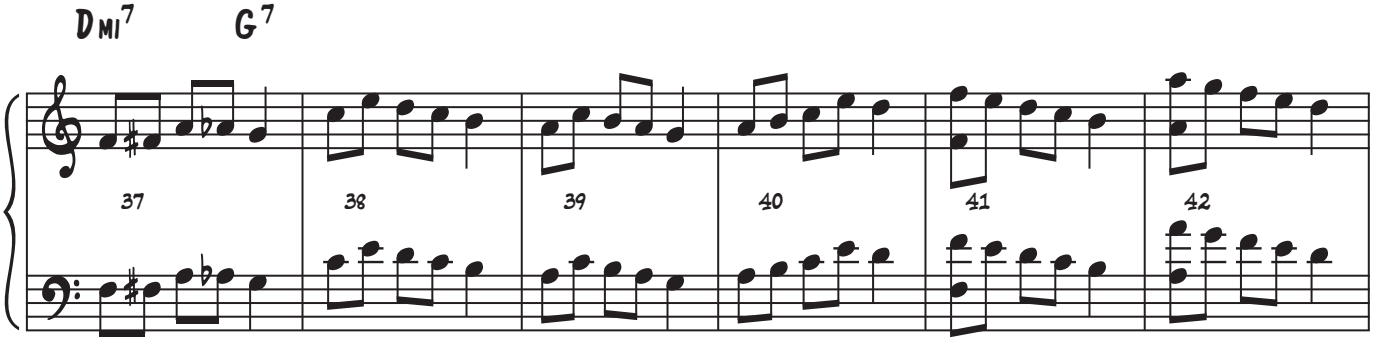
These minor7 (ii-7) improvisational blocks are used for beats 1 & 2 of the bar

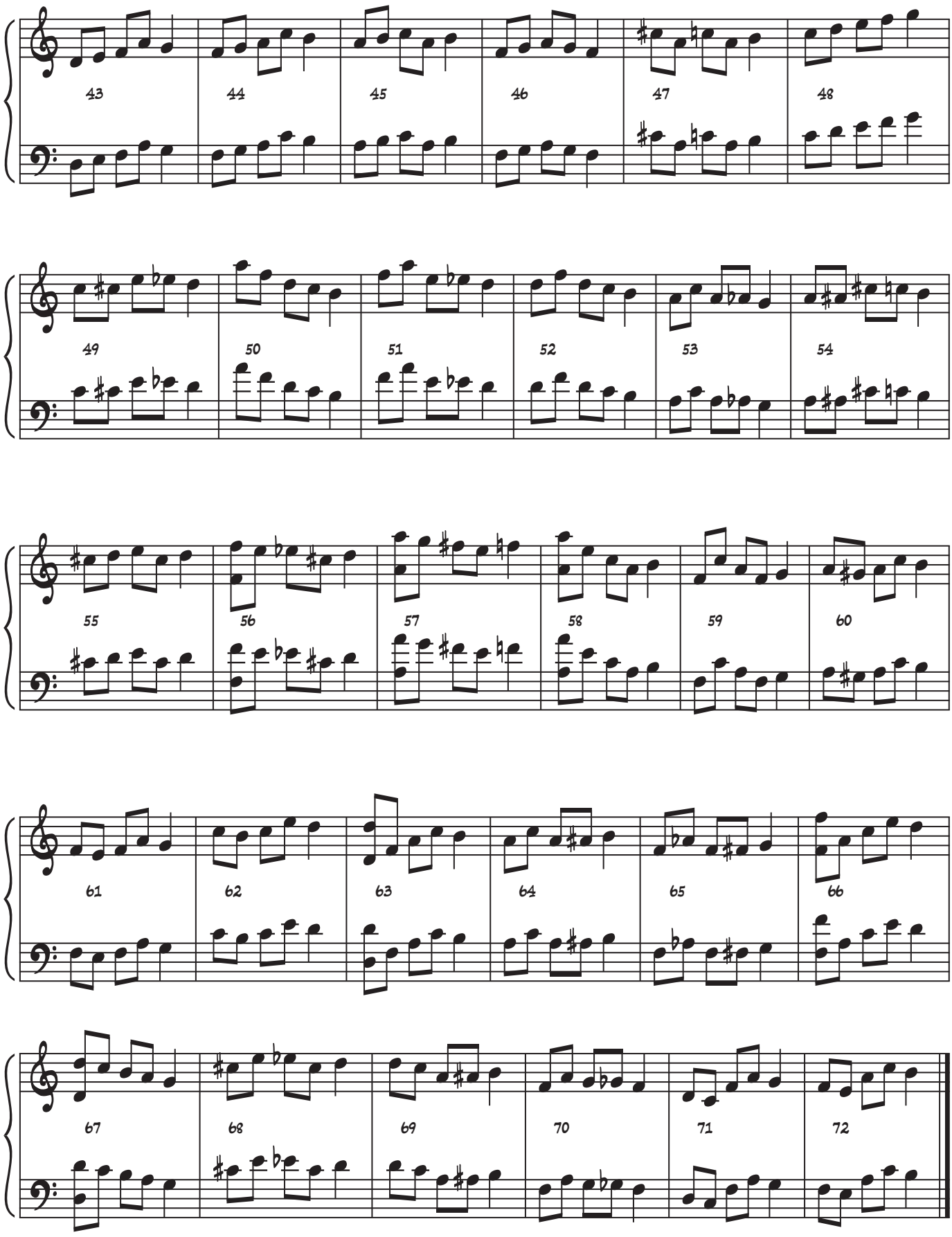


©

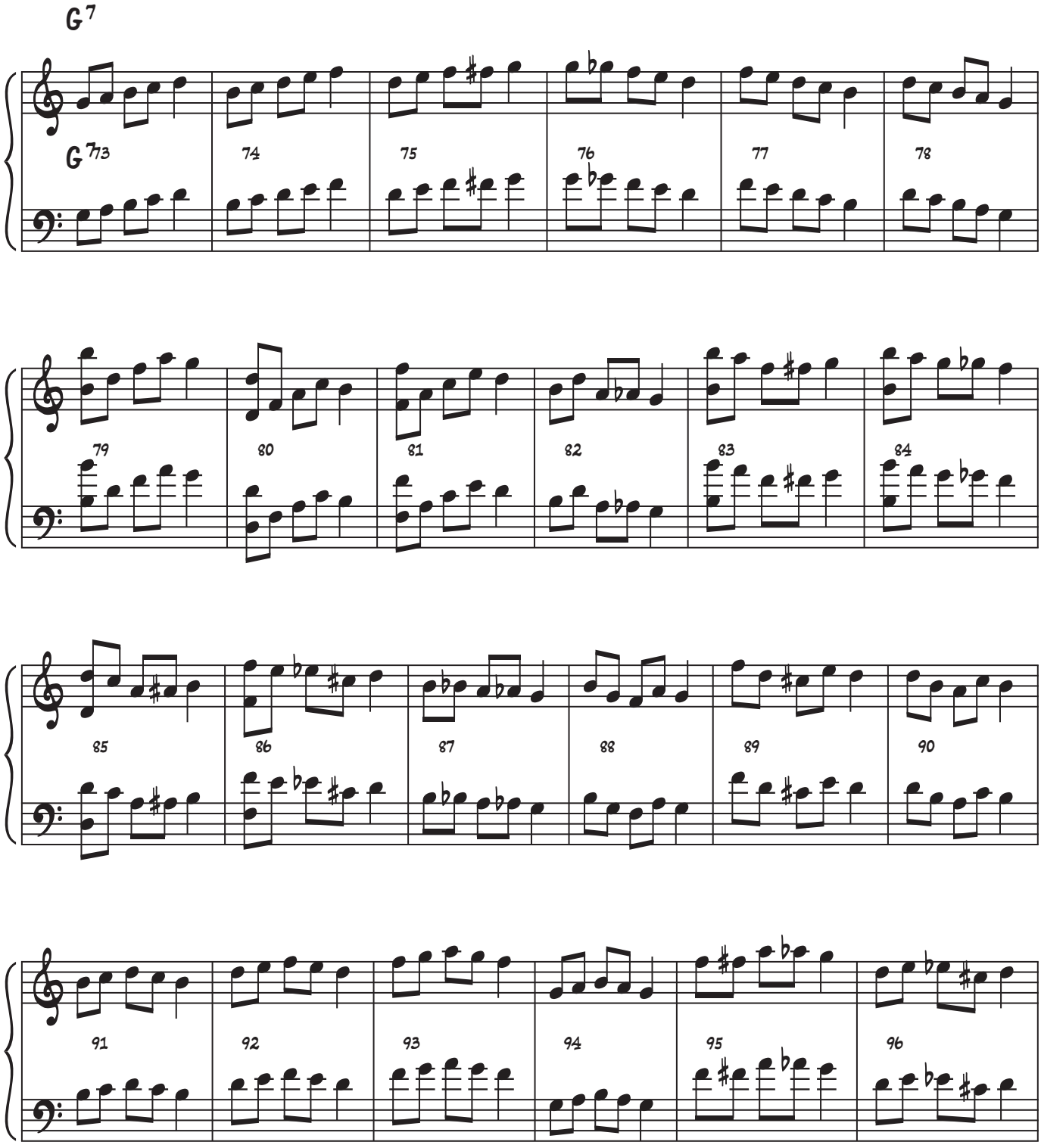


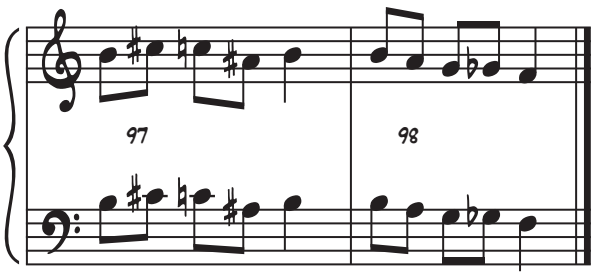
These minor7 (ii-7) improvisational blocks are used for beats 3 & 4 of the bar. ***The quarter note at the end of each of these blocks will represent the transition to the V7 (G7) chord.***



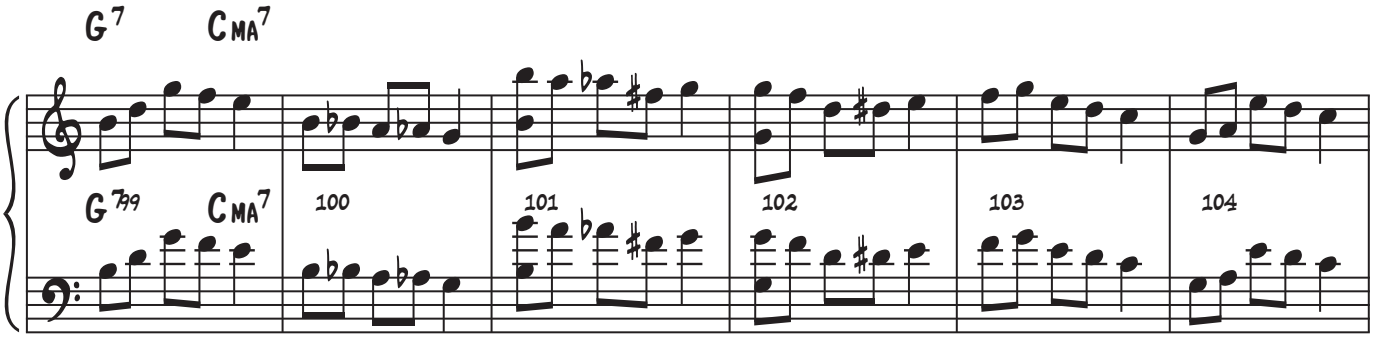

43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72

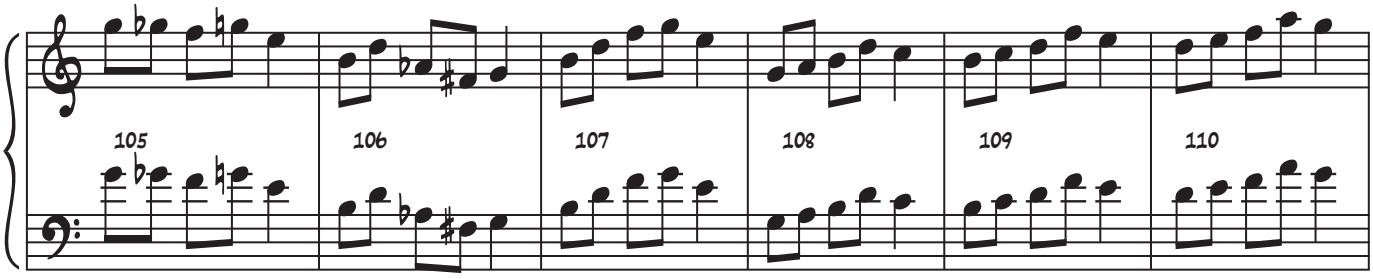
These dominant7 (V7) improvisational blocks are used for beats 1 & 2 of the bar

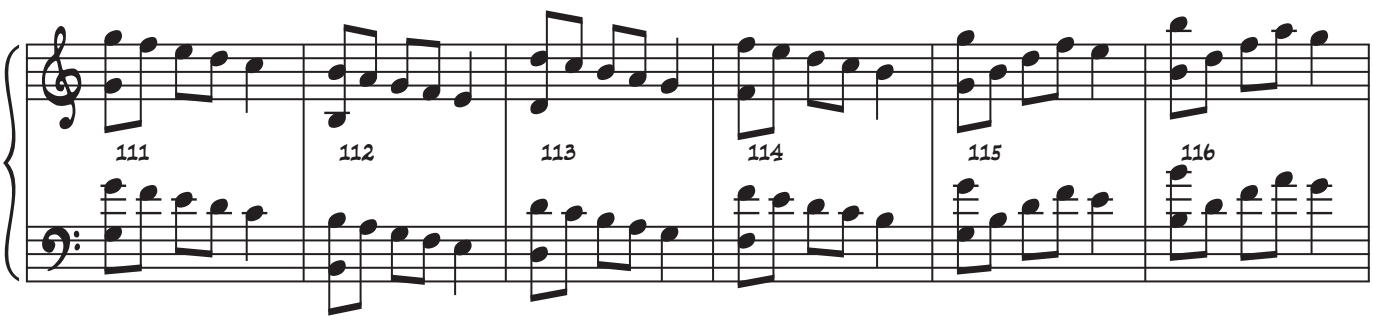


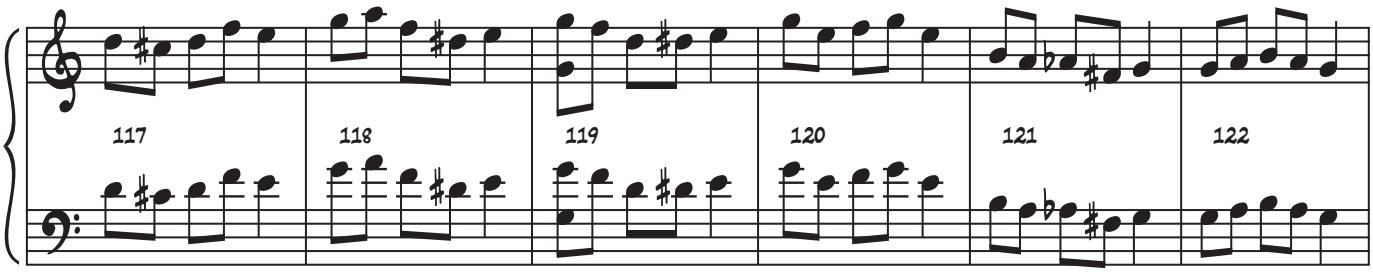


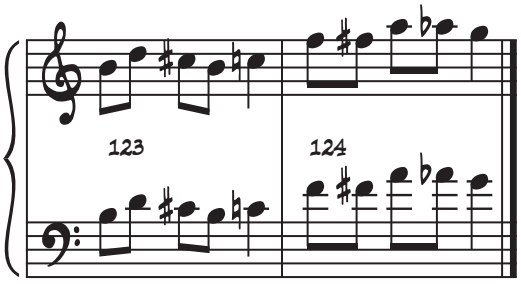
These dominant7 (V7) improvisational blocks are used for beats 3 & 4 of the bar. ***The quarter note at the end of each of these blocks will represent the transition to the IMaj7 (CMa7) chord.***



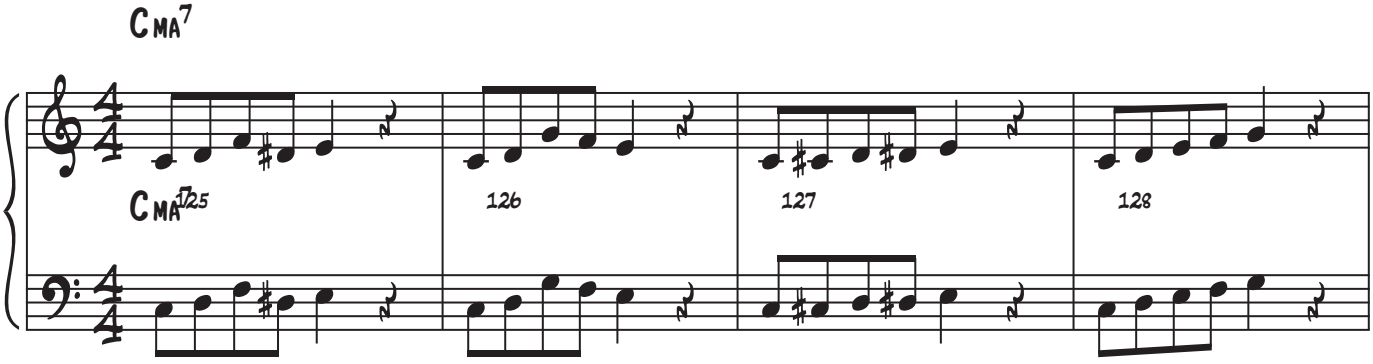


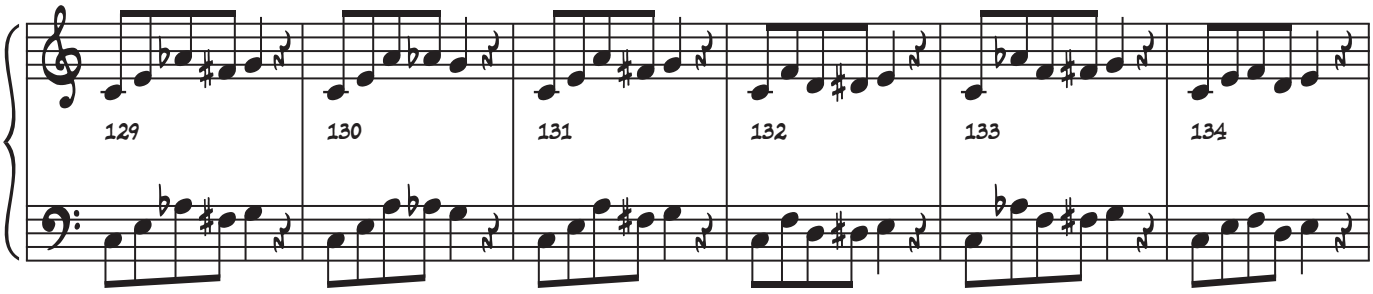


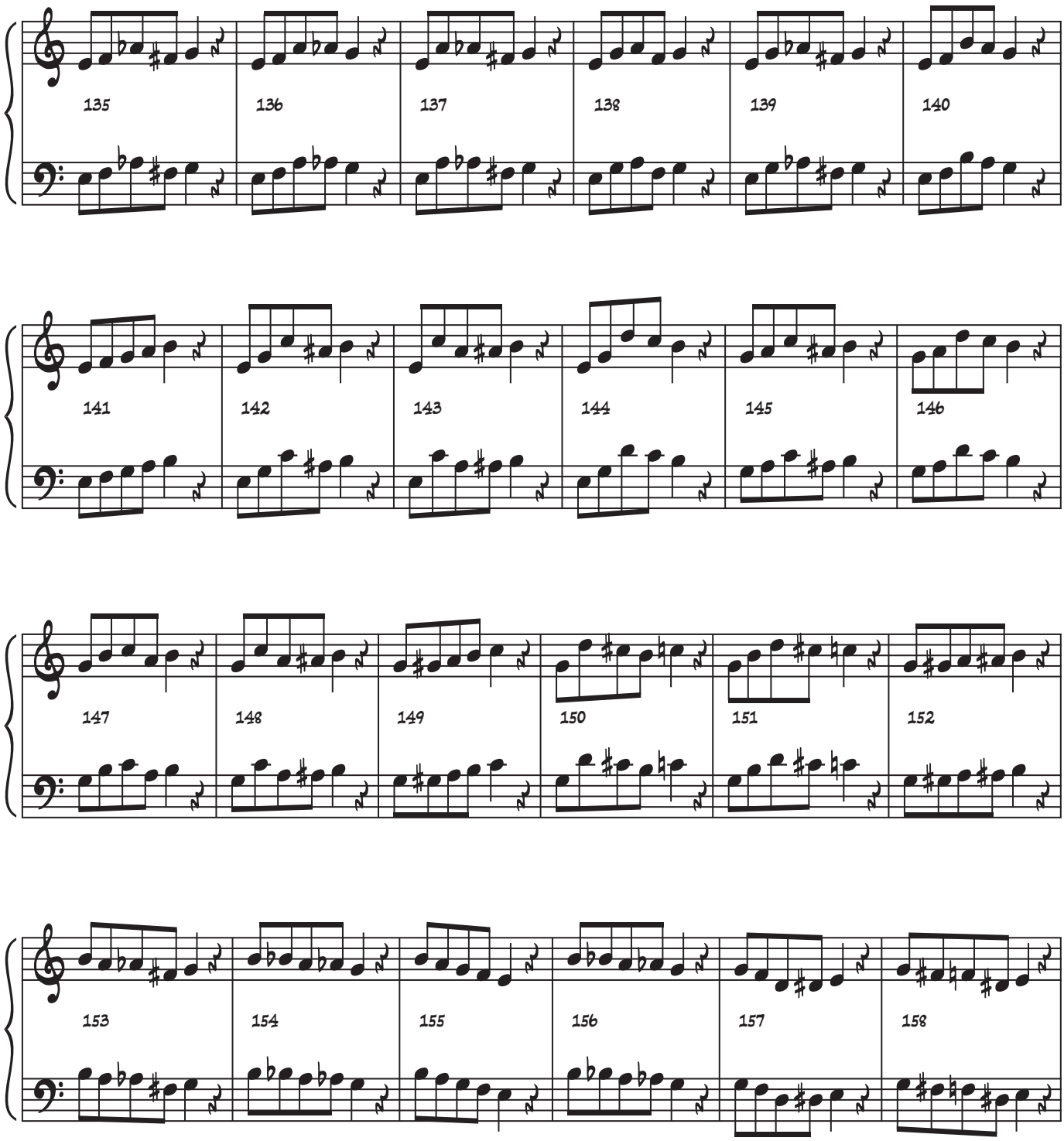


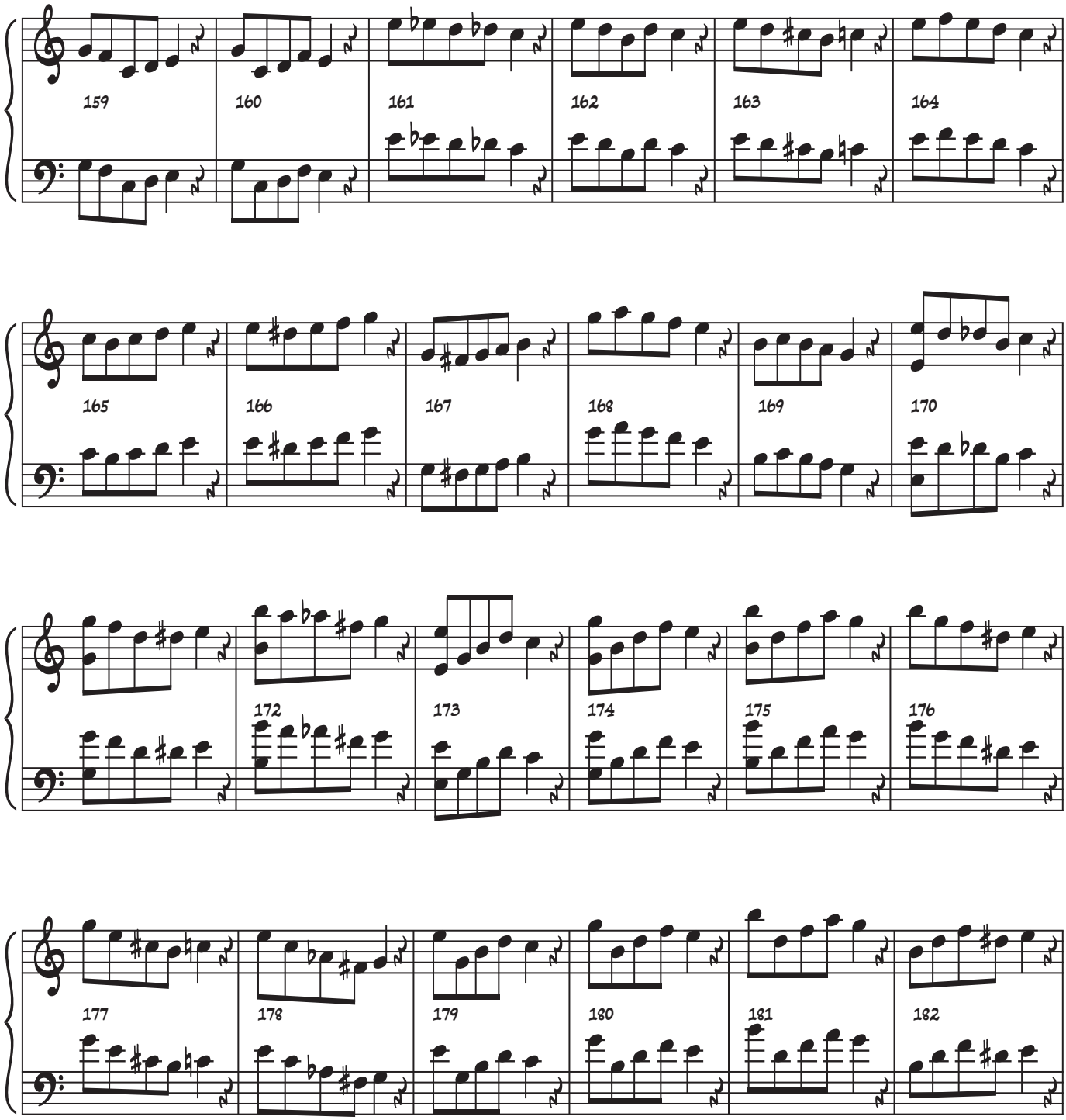


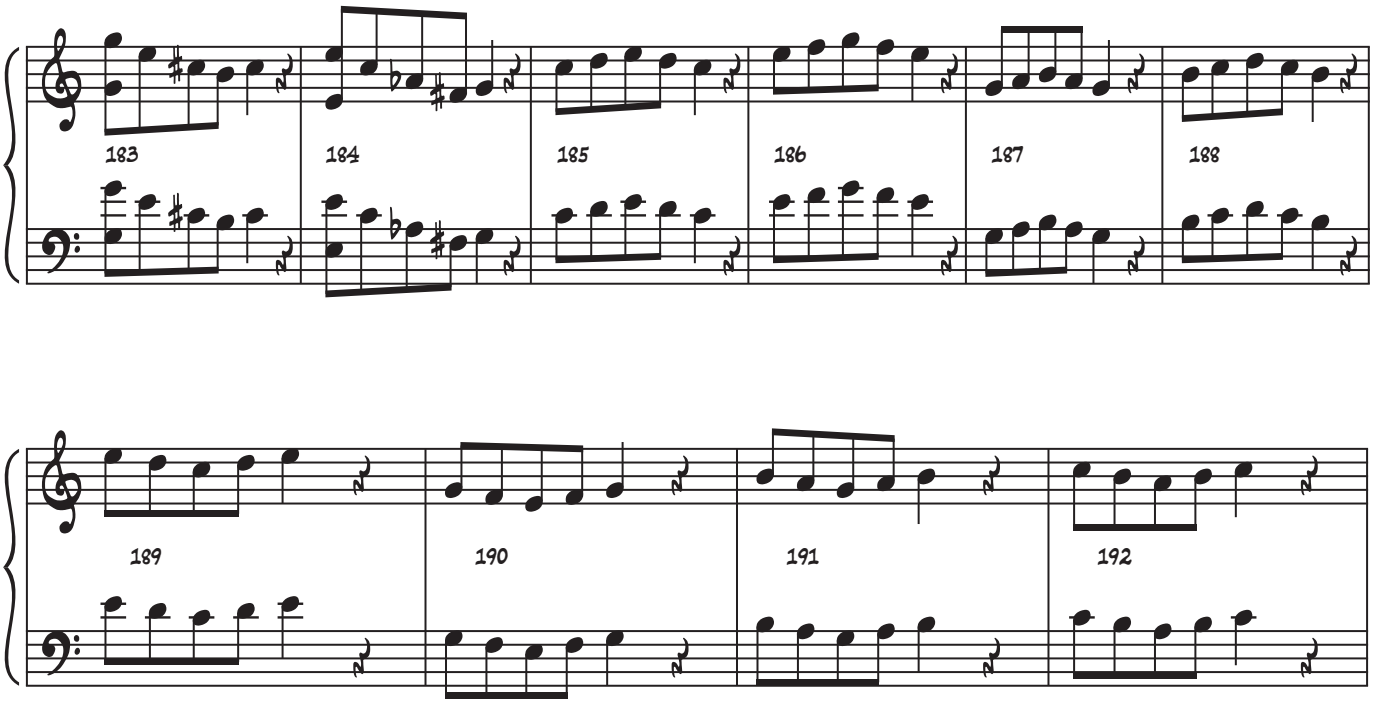
Lines for major chords. the quarter note is the connecting note to the next block. adjust octaves when needed.



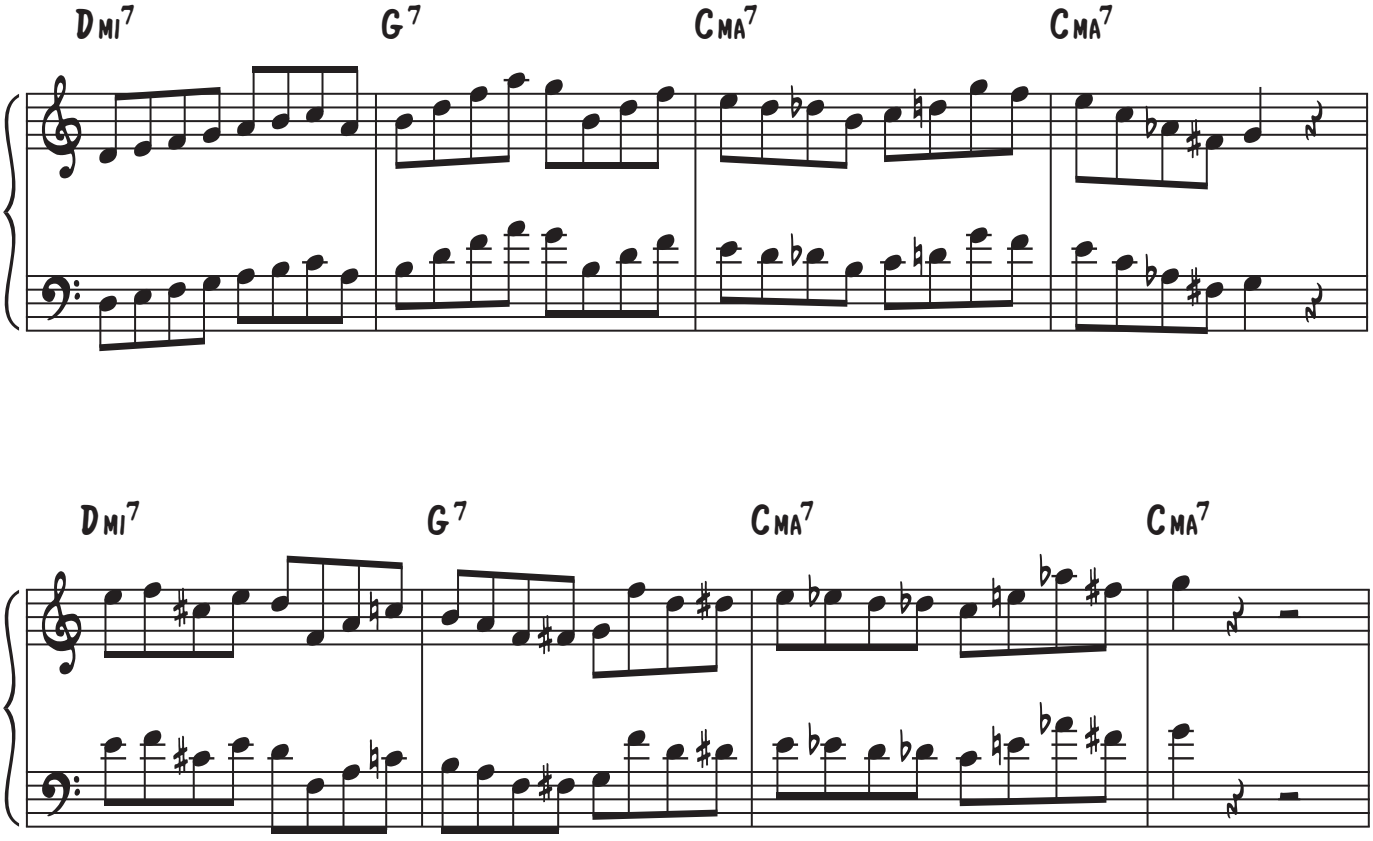


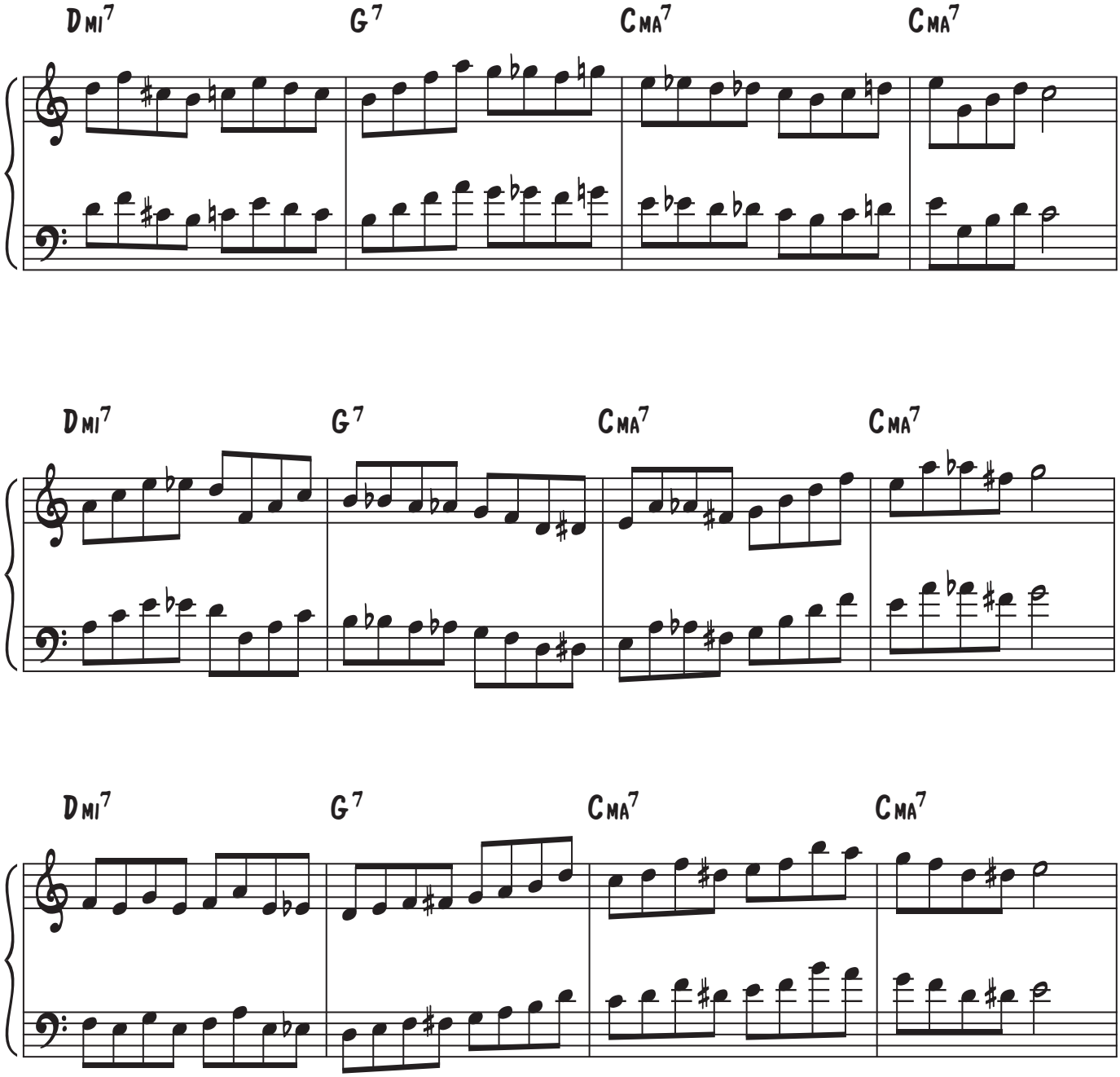
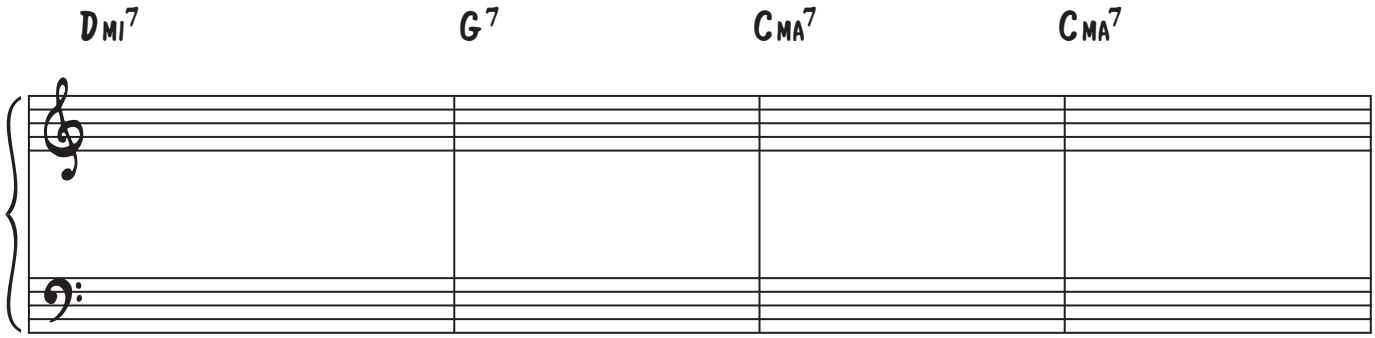
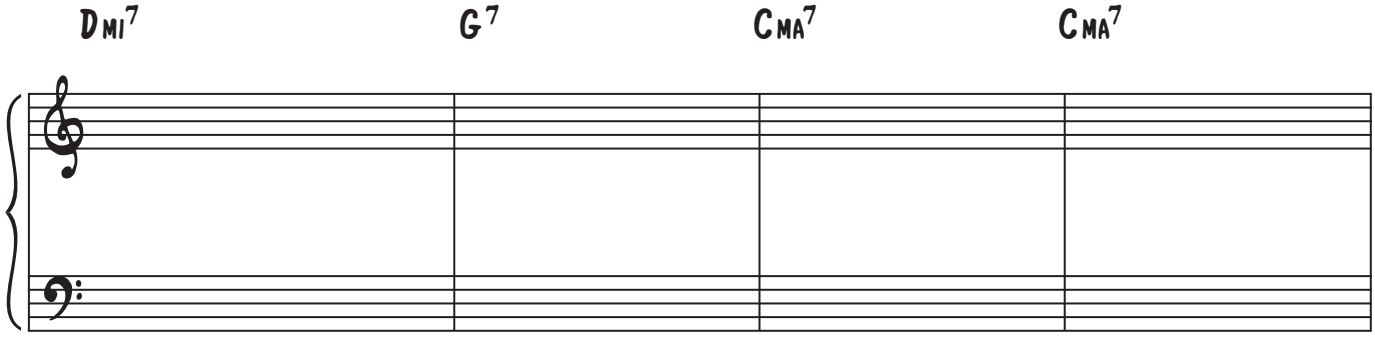
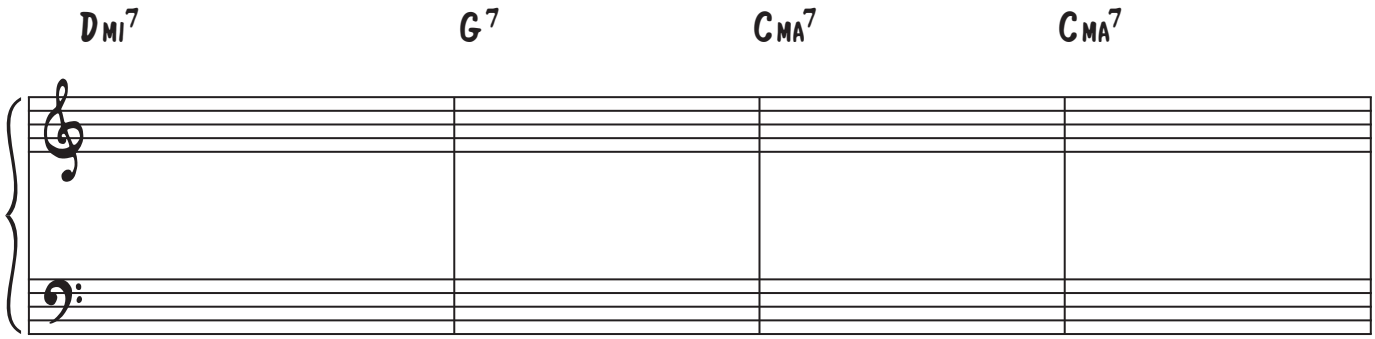
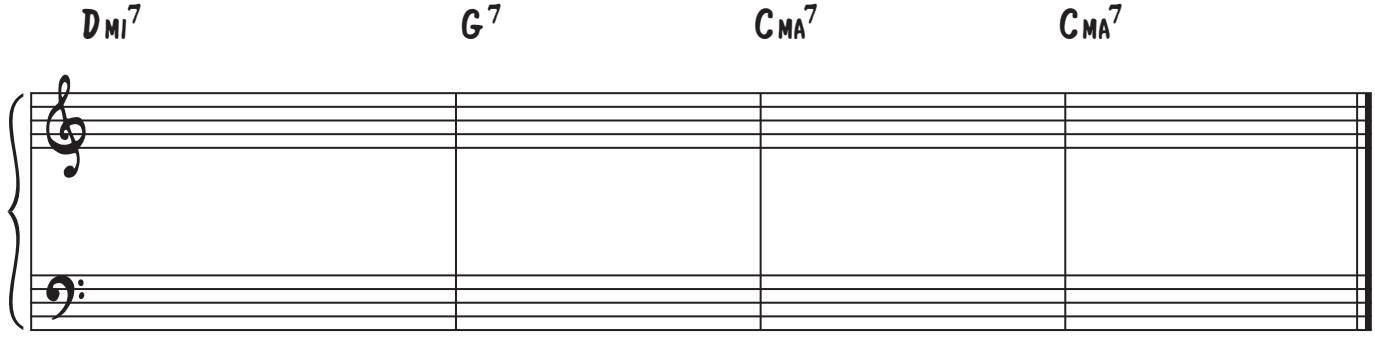

135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158


159
160
161
162
163
164
165
166
167
168
169
170
172
173
174
175
176
177
178
179
180
181
182



Sample Lines




Dmi7
G7
CMA7
CMA7
Dmi7
G7
CMA7
CMA7
Dmi7
G7
CMA7
CMA7

Write your own Lines