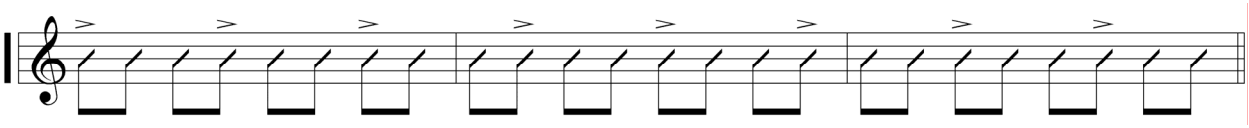
**Working With Cross Rhythms**

It could be easily argued that rhythm is the most important aspect of jazz. When it comes to rhythm, it is the excitement, variety, and interest generated by cross rhythms that gives an improvised melody an essential part of its jazz character. Cross rhythms, also known as *polyrhythms*, *displaced rhythms*, or *cross metric rhythms*, are rhythmic patterns that are organized in a way that contradicts the underlying meter, and superimposed on it. This creates ambiguity—and to a certain extent conflict—with the underlying meter.

This rhythmic innovation began in ragtime, where composers and performers began creating melodies that contained successive groupings of three eighth notes in the basic common time rhythm, where eighth notes are normally grouped in pairs. This creates a 3/8 time signature superimposed over the basic 4/4:



One aspect of cross rhythms is *syncopation*, which is the experience of accents or rhythmic emphasis where it is not normally expected. Syncopation will occur naturally as a result of any rhythm that conflicts with the underlying a time signature and is superimposed on it.

The examples below present a wide variety of cross rhythms. These exercises can be approached in a number of ways. You can practice them at the piano are away from it, with or without the metronome. Perhaps the easiest approach is to tap the beat with your foot, and tap the rhythm with your right hand. Your could also tap the beats with your right hand while you speak out the rhythm of the pattern with a neutral syllable. Try to feel the arrival of the first beat of each measure and the first note of the repeated pattern each time it returns. Another approach is to tap the basic beat in the left hand, using your index finger or your entire hand, while tapping the notated rhythm (with the accents) using your right hand. You may find it helpful to count the beats of the measure to yourself or out loud. Try to feel the rhythm in your body, and practice each pattern until you know it comfortably by rote.

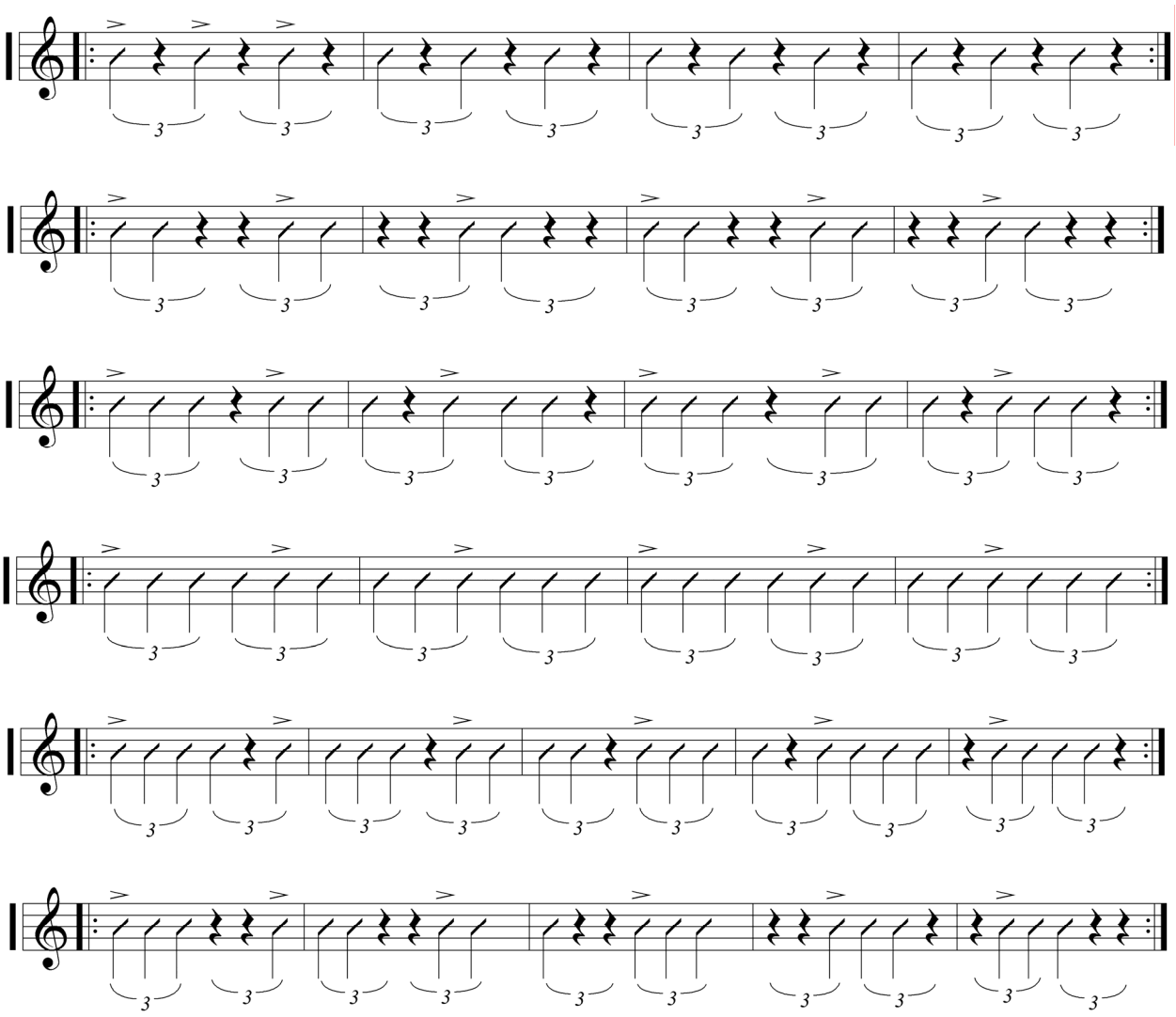
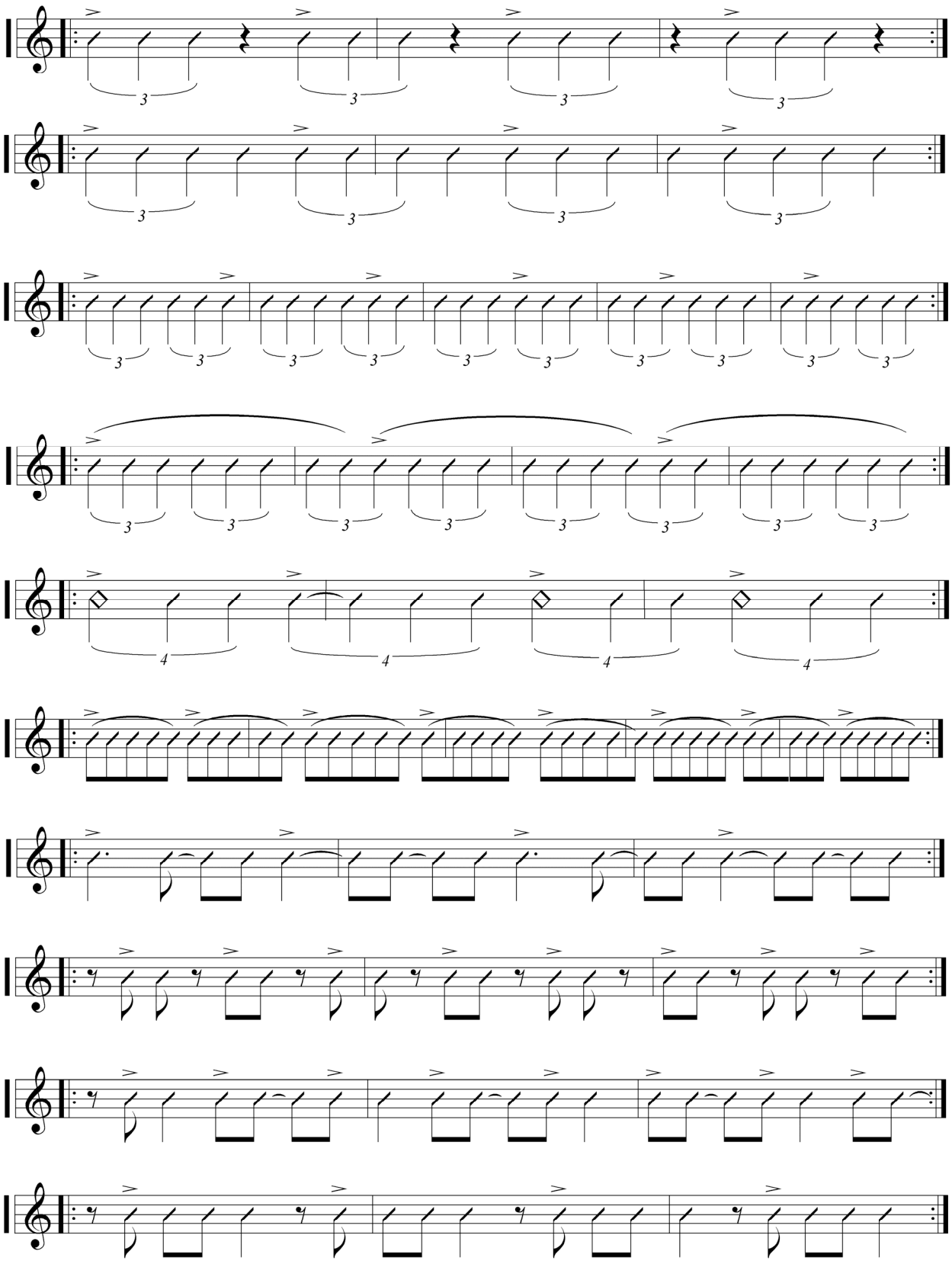
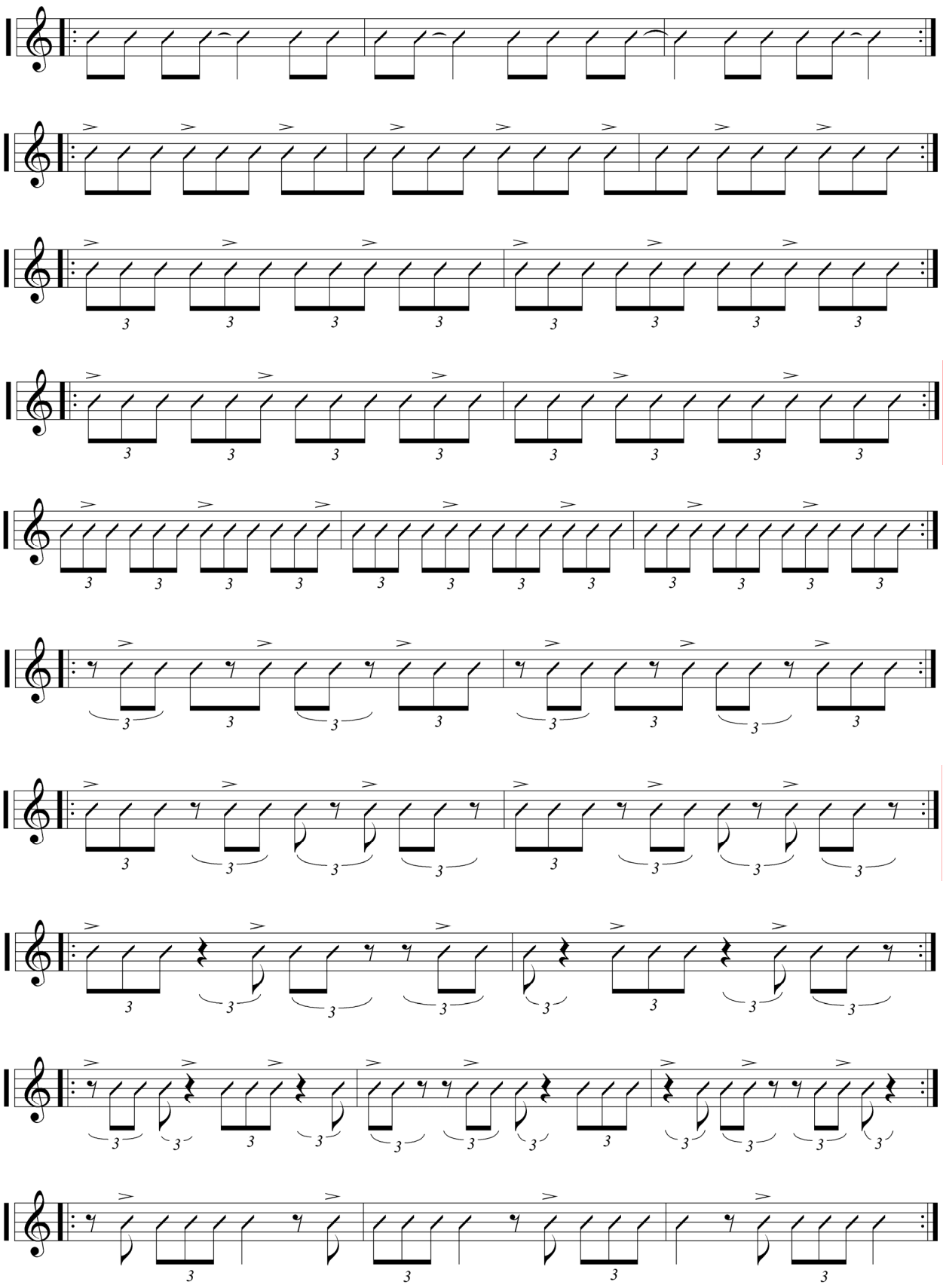
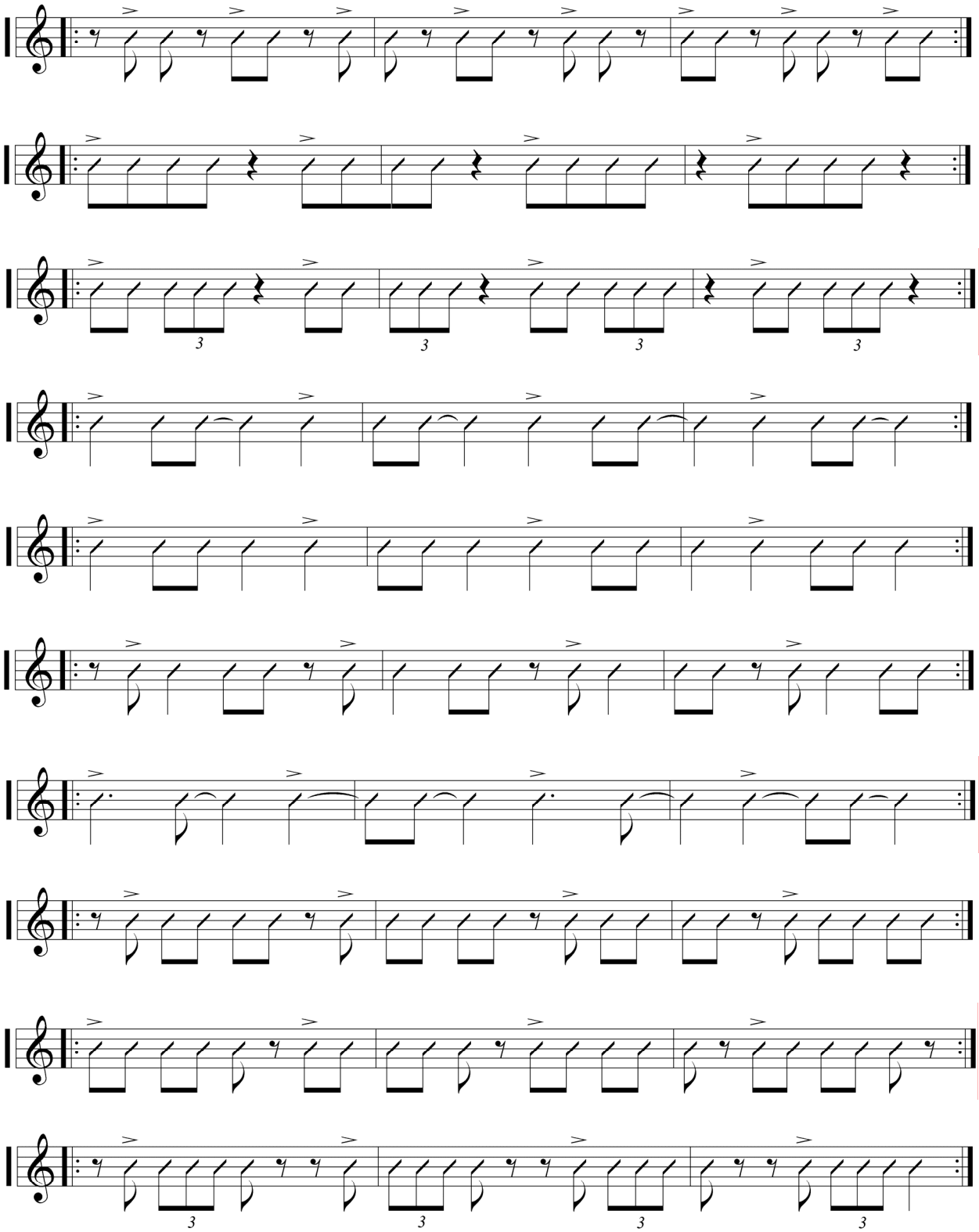
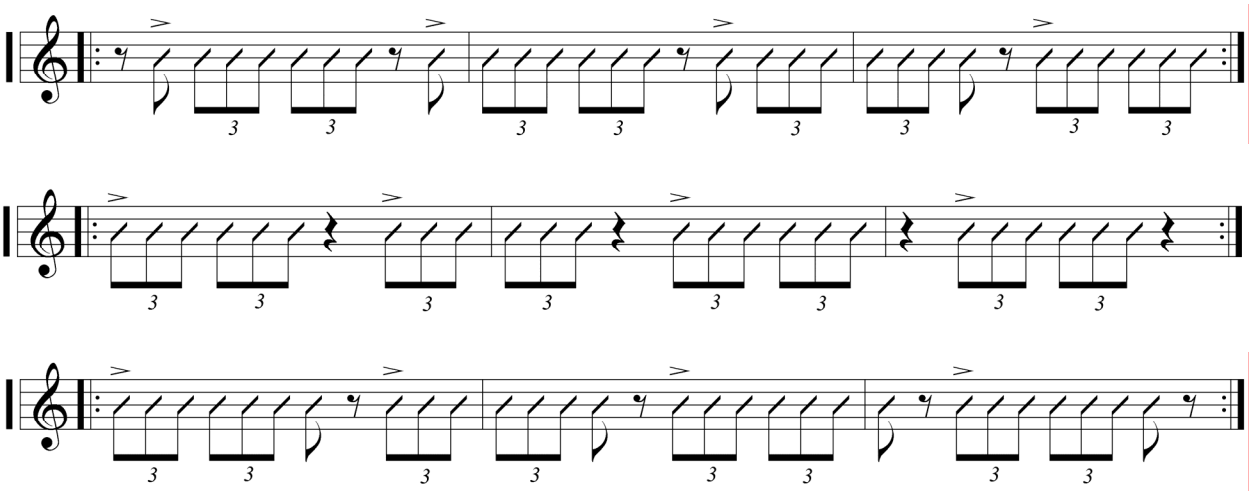
You can also use the fingers of each hand to organize the rhythmic patterns. The left hand can tap the time signature (3/4 or 4/4), while the right hand taps the rhythm, with the accents. Use the fingers of the left hand to organize the meter. If you're doing an exercise in 4/4, tap from your thumb (1) to your ring finger (4) with your left hand, while you count each beat (1-2-3-4). The fingers of the right hand can organize the rhythm of the notated pattern. If the pattern contains three repeated notes, use three fingers of the right hand, and so forth. This approach is slightly easier than using only your hands, since the fingers organize the patterns in a way that makes it more obvious. The thumb of the left hand marks the beginning of the measure, while the thumb of the right hand marks the beginning of the repeated pattern. Every so often, these will line up.

You could also use a metronome to mark the meter. It is easier to use a metronome that clicks differently on the first beat of each measure. This makes it easier for you to know if you're keeping the time, but if you can feel the meter, this type of metronome is not necessary.

After you have some familiarity and proficiency with the rhythms away from the keyboard, you can begin to apply them musically. A good way to start at the keyboard is to use basic chord progressions, such as the II-V-I. One possibility is to use I for the first measure, and II-V for the second, and so forth. This works well with rhythms that cycle through two, four, six, and eight

measures, but with odd number measure patterns, the rhythmic pattern shifts in relation to the repeated harmonic progression.

Finally, practice applying these rhythms at the piano within the context of a tune. Practice playing phrases modeled on the rhythm of the pattern. Using melodic patterns that are organized by the fingers makes it a little easier (it is easier to keep track of the repeated pattern using different notes rather than the same note). You may also want to use a metronome to supply the beats of the measure. Using a metronome that can be set to beat differently on the first beat of each measure will ensure that you are not losing the meter and that you are keeping your place in the tune.

As you practice these patterns, start off slowly and gradually increase your speed, playing the rhythms as quickly as possible. As you practice the pattern, you'll be able to keep the underlying meter and develop a natural feeling for the superimposed rhythm.

The patterns presented here are only a small selection of the many types of displaced and "cross metric" rhythms that occur in an improvised jazz setting. Use these as a beginning to creating other rhythms that you can apply to your improvisations.