Chapter 12 Triad Inversions, 1: Letters for Roots

In this chapter you will:

1. Invert triads
2. Identify inversions with Arabic numerals
3. Identify roots of inverted triads
4. Complete a chart about triad inversions
5. Review inversions and write abbreviated Arabic numerals
6. Notate inverted triads
7. Review inversions and Roman numerals

12.1 Invert Triads

- To **invert** a chord, raise the bottom note to a higher octave.
- A **root position** chord is stacked in thirds, as in previous chapters. See the first chord above.
- A **first inversion** chord is a root position chord which has been inverted once. See the second chord above.
- A **second inversion** chord is a root position chord which has been inverted twice. See the third chord above.
- Letter names for the **root, third and fifth** remain the same after inversion. Therefore an E chord (a chord whose root is E) remains an E chord after inversion. See the three E chords above and on the right.

1. **INVERT** these triads.

2. a. **CIRCLE** the root of these triads.
   b. **INVERT** the triads.
   c. **CIRCLE** the root of the inversion.
12. Inverted Triads, 1: Letters as Roots

12.2 Identify inversions with Arabic numerals

- Root position triads are given the numbers 3. These numbers are often omitted.
- First inversion triads are given the numbers 6/3, usually abbreviated 6.
- Second inversion triads are given the numbers 4. They are never abbreviated.
- These numbers are called Arabic numerals (as distinguished from Roman numerals).
- Arabic numerals are intervals between the bottom note and the other two notes of the triad. See the bracketed intervals in the above illustration.
- The third is always on the bottom of a first inversion triad and the fifth is always on the bottom of a second inversion triad.

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1. a. IDENTIFY as root position, 1st or 2nd inversion.
   b. WRITE the full Arabic numerals (both numbers).

2. a. IDENTIFY the triad as root position, 1st or 2nd inversion.
   b. IDENTIFY the bottom note as the root, third or fifth of the chord.

3. WRITE full Arabic numerals under each triad in this arrangement of "Taps."
12. Inverted Triads, 1: Letters as Roots

Reference Sheet

MEMORIZE the following chart.

<table>
<thead>
<tr>
<th>On the staff</th>
<th>5 (\frac{1}{3})</th>
<th>6 (\frac{1}{3})</th>
<th>6 (\frac{1}{4}) (no abbreviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Arabic numerals</td>
<td>5 (\frac{1}{3})</td>
<td>6 (\frac{1}{3})</td>
<td>6 (\frac{1}{4}) (no abbreviation)</td>
</tr>
<tr>
<td>Abbreviated Arabic numerals</td>
<td>(left blank)</td>
<td>6</td>
<td>6 (\frac{1}{4}) (no abbreviation)</td>
</tr>
<tr>
<td>Name</td>
<td>Root position</td>
<td>First inversion</td>
<td>Second inversion</td>
</tr>
<tr>
<td>Bottom note</td>
<td>root</td>
<td>third</td>
<td>fifth</td>
</tr>
</tbody>
</table>
12. Inverted Triads, 1: Letters as Roots

12.3 Identify roots of inverted triads

- Recall that the root is on the bottom of a root position triad.
- The root of an inverted triad is the top note of the interval of a fourth.
- The notes of a fourth are always one on a line and one in a space.

1. WRITE the letter of the root of these inverted and root position triads.
2. WRITE abbreviated Arabic numerals next to the letter (write no Arabic numerals for root position and recall that there is no abbreviation for second inversion).
### 12.4 Complete a chart

COMPLETE this chart from memory.

<table>
<thead>
<tr>
<th>On the staff</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Arabic numerals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbreviated Arabic numerals</td>
<td></td>
<td>( \frac{6}{4} ) (no abbreviation)</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom note</td>
<td>root</td>
<td></td>
</tr>
</tbody>
</table>
12. Inverted Triads, 1: Letters as Roots

12.5 Review inversions and write abbreviated Arabic numerals

1. ANALYZE the following triads.
   a. IDENTIFY the triad as root pos., 1st Inv. or 2nd Inv.
   b. WRITE ABBREVIATED Arabic numerals (LEAVE BLANK for root position triads).
   c. WRITE the letter of the root.
   d. IDENTIFY the bottom note as the root, third or fifth of the triad.

2. ANALYZE the chords in the following folk song.
   a. WRITE letter names of roots and abbreviated Arabic numerals both in the same space below each triad.
   b. WRITE, for the above music, the scale degree name (tonic, supertonic…) of the roots of the triads with numbers above them.

<table>
<thead>
<tr>
<th>Triad</th>
<th>Scale Degree Name</th>
<th>Triad</th>
<th>Scale Degree Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>6.</td>
<td></td>
</tr>
</tbody>
</table>
12. Inverted Triads, 1: Letters as Roots

12.6 Notate inverted triads

1. Write a 2\textsuperscript{nd} inversion triad, method 1

\begin{center}
\begin{tabular}{c|c|c}
\hline
To write: & A maj & \\
\textbf{F} & \textbf{A} & \textbf{D} \\
\textbf{G} & \textbf{A} & \textbf{F} \\
\hline
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{c|c|c}
\hline
Step 1 & Step 2 & Step 3 \\
\hline
\end{tabular}
\end{center}

2. Alternate method

\begin{center}
\begin{tabular}{c|c|c}
\hline
To write: & A maj & \\
\textbf{F} & \textbf{A} & \textbf{D} \\
\textbf{G} & \textbf{A} & \textbf{F} \\
\hline
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{c|c|c}
\hline
Step 1 & Step 2 & Step 3 \\
\hline
\end{tabular}
\end{center}

- A \textit{chord tone} is a member of a chord with no specific octave. "Chord tone" is a general term, like "letter names" for notes.
- Dots on the staff represent chord tones.
- To write inverted triads follow these steps carefully*
  1. Write a root position triad with chord tone dots. See both illustrations above.
  2. Add sharps or flats for the given chord quality (major, minor, diminished or augmented).
  3. Invert the triad:
     For first inversion, invert once.
     For second inversion, EITHER invert twice (Illustration 1, above), OR bring the fifth below the root (Illustration 2).

*Do not immediately write an inverted triad with the given root as the bottom note. Your triad will have the wrong root and you will not be able to alter notes to get the correct chord quality.

NOTATE these triads.

\begin{center}
\begin{tabular}{c|c|c|c|c}
\hline
\textbf{F}\# min 6 & \textbf{G} min & A\textsubscript{b} aug & B maj \\
\hline
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{c|c|c|c|c}
\hline
\textbf{C}\# dim & \textbf{F}\# maj & A maj & D min & E Aug \\
\hline
\end{tabular}
\end{center}
12. Inverted Triads, 1: Letters as Roots

12.7 Review inversions and Roman numerals

1. WRITE
   a. whether the triad is root position, 1\textsuperscript{st} or 2\textsuperscript{nd} inversion
   b. whether the root, 3rd or 5\textsuperscript{th} is on the bottom
   c. the abbreviated Arabic numerals (if applicable)

   \includegraphics[width=\textwidth]{inversion_diagram.png}

   a. ___ b. ___ c. ___
   a. ___ b. ___ c. ___
   a. ___ b. ___ c. ___
   a. ___ b. ___ c. ___

2. WRITE the key followed by a colon, and the Roman numeral.

   a. Major keys

   \includegraphics[width=\textwidth]{major_key_diagram.png}

   still bass clef!

   __  __  __  __  __  __  __  __

   b. Minor keys

   \includegraphics[width=\textwidth]{minor_key_diagram.png}

   __  __  __  __  __  __  __  __