A **chord** is a simultaneous sounding of more than 2 notes.

A **triad** is a chord that contains 3 notes and is a **tertian** chord -- a chord built in thirds.

---

**QUALITIES:**

Any triad is one of **4 qualities** -- major, minor, diminished, augmented.

Each quality triad contains a unique set of intervals.

Triads occur in root position, first and second inversion.

**ROOT POSITION:**

A triad is said to be in root position when all the intervals are types of thirds. In this case, the bottom note is called the root.

**Root position** is also known as $\frac{5}{3}$ position, since there is always an interval of a third and 5th above the root.

---

<table>
<thead>
<tr>
<th>Chords</th>
<th>Triads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

M\(_3^5\)  m\(_3^5\)  d\(_3^5\)  A\(_3^5\)

contains:

<table>
<thead>
<tr>
<th></th>
<th>P5</th>
<th>P5</th>
<th>d5</th>
<th>A5</th>
</tr>
</thead>
<tbody>
<tr>
<td>M3</td>
<td>m3</td>
<td>m3</td>
<td>M3</td>
<td></td>
</tr>
</tbody>
</table>
**INVERSION:**

A triad is said to be inverted if the bottom-most note -- the bass -- is not the root of the chord.

**FIRST INVERSION:**

A triad is said to be in first inversion if the third of the chord is in the bass (the bottom-most voice).

Each quality triad may occur in first inversion.

In first inversion all triads will contain the interval of a 3rd and a 6th above the bass. Therefore, a first inversion chord is said to be in $^{6}_{3}$ position.

The quality of the 3rds and 6ths will be different for each quality of chord.

![First Inversion Diagram](image)

contains:

- $M_{3}^{6}$
- $m_{3}^{6}$
- $d_{3}^{6}$
- $A_{3}^{6}$

- $m6$
- $M6$
- $M6$
- $m6$

- $m3$
- $M3$
- $m3$
- $M3$

**SECOND INVERSION:**

A triad is said to be in second inversion if the fifth of the chord is in the bass (the bottom-most voice).

Each quality triad may occur in second inversion.

In second inversion all triads will contain the interval of a 4th and a 6th above the bass. Therefore, a first inversion chord is said to be in $^{6}_{4}$ position.

The quality of the 4ths and 6ths will be different for each quality of chord.

![Second Inversion Diagram](image)

contains:

- $M_{4}^{6}$
- $m_{4}^{6}$
- $d_{4}^{6}$
- $A_{4}^{6}$

- $M6$
- $m6$
- $M6$
- $m6$

- $P4$
- $P4$
- $A4$
- $d4$
**TRIADS IN KEYS:**

A triad can be built on each note of a scale. The resulting triads will have particular qualities and these qualities will differ according to the type of scale used.

Example: In G major:

![Chord Diagram]

**CHORD DESIGNATIONS:**

Chords are designated by **Roman and Arabic numerals**.

**ROMAN NUMERALS:**

The Roman numeral tells the root of the chord (what scale degree it is)

You may also see different types of Roman numeral designations such as:

- upper case = major  (V, I)
- lower case = minor  (ii, vi)
- upper case with + = augmented (III⁺)
- lower case with o = diminished (vii⁰, ii⁰)

**ARABIC NUMERAL**

The Arabic numeral tells you the position or inversion of the chord:

\[ \begin{align*}
5 & = root \ position \\
3 & = first \ inversion \\
4 & = second \ inversion
\end{align*} \]

**TRIADS IN A MAJOR KEY:**

Triads built on the degrees of a major scale will have the following qualities and designations:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>m</td>
<td>m</td>
<td>M</td>
<td>M</td>
<td>m</td>
<td>d</td>
</tr>
<tr>
<td>I</td>
<td>ii</td>
<td>iii</td>
<td>IV</td>
<td>V</td>
<td>vi</td>
<td>vii⁰</td>
</tr>
</tbody>
</table>
Triads in Minor Keys

Triads built on the notes of a natural minor scale will have the following qualities and designations:

```
1  2  3  4  5  6  7
m  d  M  m  M  M  M
i  ii  III  iv  V  VI  VII
```

If you use the chords of a natural minor scale, the i-v-i progression will sound incomplete.

To make this progression sound more ‘natural’ [i-V-i], always use the leading tone in the scale -- use a harmonic minor scale.

The triads built from the notes of a harmonic minor scale will have the following qualities and designations:

```
1  2  3  4  5  6  7
m  d  A  m  M  M  d
i  ii  III+  iv  V  VI  vii°
```

We can also use the triads built from the notes of a melodic minor scale. These triads will have the following qualities and designations:

```
ascending:
1  2  3  4  5  6  7
m  m  A  M  M  d  d
i  ii  III+  IV  V  vi°  vii°
```

descending:
```
m  d  M  m  m  M  M
i  ii  III  iv  v  VI  VII
```

In minor keys the most commonly used chords (and the ones you should memorize) are:

```
i  ii°  III(+)  iv  V  VI  vii° (or VII)
```