**Triads**
Ted Greene – 1973-03-24

**Major Scale** = whole, whole, 1/2, whole, whole, whole, 1/2.

1 2 3 4 5 6 7 8

Example: A major scale: A B C# D E F# G# A

1, 8 is called root or tonic.

9 = 2; 11 = 4; 13 = 6

**Triad Chord Formulas:**
- **Major** – 1, 3, 5
- **Minor** – 1, b3, 5
- **Augmented** – 1, 3, #5
- **Diminished** – 1, b3, b5

**Closed Voicing Triads (Close Triads)**

**Open Voiced Triads (Open Triads)**
## 7th Chord Triads

![Chord Diagrams]

Diatonic Major Scale Triads: I ii iii IV V vi vii°
Diatonic Major Scale 7th Chords: I7 ii7 iii7 IV7 V7 vi7 vii7°
Diatonic Major Scale 9, 11, 13th Chords: I9, I13; ii9, ii11; iii9, iii11;
IV9, IV13(#11); V9, V11, V13; vim9, vim11;
vi7 extensions are commonly thought of as V7 extensions.

### List of Common Extensions

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
<th>Dominant 7th</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th: 1,3,5,6</td>
<td>m6: 1,3,5</td>
<td>7th: 1,3,5,7</td>
</tr>
<tr>
<td>7°: 1,3,5,7</td>
<td>m6/9: 1,3,5,6,9</td>
<td>7/6: 1,3,5,7,13</td>
</tr>
<tr>
<td>6/9: 1,3,5,6,9</td>
<td>m7: 1,3,5,7</td>
<td>9: 1,3,5,7,9</td>
</tr>
<tr>
<td>7°: 1,3,5,7</td>
<td>m7/11: 1,3,5,7,11</td>
<td>13: 1,3,5,7,9,13</td>
</tr>
<tr>
<td>7°: 1,3,5,7</td>
<td>m9: 1,3,5,7</td>
<td>7sus: 1,4,5,7</td>
</tr>
<tr>
<td>/9: 1,3,5,9</td>
<td>m11: 1,3,5,7,9,11</td>
<td>7/6sus: 1,4,5,7,13</td>
</tr>
<tr>
<td>13sus: 1,4,5,7,9,13</td>
<td>m7: 1,3,5,7</td>
<td>11(9sus): 1,4,5,7,9</td>
</tr>
<tr>
<td>m/9: 1,3,5,7</td>
<td>m7/9: 1,3,5,7,9</td>
<td>+: 1,3,#5</td>
</tr>
<tr>
<td>7°: 1,3,5,7</td>
<td>m13: 1,3,5,7,9</td>
<td>13sus: 1,4,5,7,9,13</td>
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</tbody>
</table>

### Common Chord Progressions

Do in Major keys (and relative minor keys where possible)

1) I – IV – I
   I – V – I
   I – IV – (I) – V – I
   I – V – (I) – IV – I

2) I – vi – ii – V – (I)
   I – vi – IV – V – (I)
   iii – vi – ii – V – (I)
   III – vi7 – II7 – V7 – (I)
   vii – II – ii – V – (I)

3) I – iii – IV – V
   I – I7 – IV – V
   I – III – IV – I
   vi – iii – IV – I
   ii – vi – IV – I
   I – ii – IV – I

4) I – I7 – IV – iv – I
   vii – II – ii – V – (I)
Common 4-Bar (8-Bar) Progressions:
4) #ivm7b5 – iv7 – iii – bIII – bVI – bII – ii – V → I
7) I – IV – vii(°) – III – vi – II – v – I7 → IV or IV used for ii
9) I – bVII7 – iii – VI – bVI – ii – V → I

Three Principle Groups of Sounds:
- Tonic – I, iii, vi
- Subdominant – IV, iv, ii, II
- Dominant – V, vii°, ii°, iv, i°

Chord Substitution. You may:
1) You may replace any diatonic triad with its related diatonic 7th chord.
2) Replace any diatonic triad or 7th chord with its related 9th 11th (7/11), or 13 (7/6). These are chords that have 11th’s but no 9ths, also 13ths but no 9ths or 11ths. All of these are called Extensions.
3) To any major triad, add the dominant 7th extensions for a change of color. This does not always work – experience will teach you when to do or not to do this.
4) A very common practice is that of temporarily treating any major, minor, or dominant 7th type chord as a tonic and preceding it with its V7 (V), ii7-V7, II7-V7, IV-V7 or iv-V7. These chords are called Secondary Dominants. When preceding a 7th chord, it is also common, even more common to use vm7. Example: Precede C7 with Gm7 instead of G7.
5) Substitute iv for ii, v for iii – use extensions of these.
6) In any chord with an unaltered 5th, the 5th may be omitted. In any 9th, 11th, or 13th type of chord, (and occasionally a 7th type), the root may be omitted.
7) In any chord the 5th may be raised or lowered; however, the most common chords to accept this alteration are 7ths, 9ths, m7s, and 47ths. A b9 or #9 are sometimes added to dominant 7th type chords, especially the 7th chord itself. (b9ths are sometimes added to m7s also.)
8) Any dominant 7th chord serving a non-tonic or subdominant function may be replaced with another dominant 7th type chord whose root is a b5th higher.

Example: Basic → C E7 Am → C (B♭13) Am

A curious relationship is that the extended notes of one equal the altered notes of the other. Example: compare B♭13 and E7#9+, B♭9 and E7b9+, etc. Sometimes major7 types or m7 types are used on the b5th principle.

Examples: Basic: C A7 D7 G7 → C9 E♭7 (Ab^7) G7+
Basic: C Am7 Dm7 G7 → Em7 A7 (Em7) Ab7 Dm7 G7
Notice the A7 and Ab7 chords above – it is common to insert 7th chords (or extensions) whose roots are a 4th higher after m7th type chords – kind of like the reverse of the Secondary Dominant procedure.

9) It is common to precede any chord with its I°7.
Example: Basic → C F G → C°7 C F°7 F G°7 G7

The other common use of I°7s is as 7b9 chords:
Example: Basic → C Eb°7 Dm G7 → C D7b9 Dm7 G7

10) Substitute #ivm7b5 for I or IV for deceptive progression; also I°7 for I, i for I, bVI for I, bIII for iii, and many others.

11) Compare → i bVII bVI V = vi V IV III of key of bIII.
It is common to mix in chords of the key of the bIII with the chords of the I key.
Example: in the key of C you might use Eb(7), Fm(7), Gm(7), Ab(7), Bb(7), Cm(7), Dm7b5.

It is also common to use the chord of the key of IV, bVII, V, and bVI with the I key – experiment.
This whole principle is called the Borrowed Chord Principle.
Examples (in the key of C):
1) C Ab Eb G C
2) Ab Eb Bb F C
3) C Gm C
4) C C7 F Fm C
5) C Eb Cm Fm Ab C
Triads — Ted Greene, 1973-03-24

--- Small ---

A7

--- Medium ---

A7

--- Large ---

A7
**CHORD SUBSTITUTION**

- Replace any diatonic triad with its related diatonic 7th chord.
- Replace any diatonic chord with its related 9th, 11th, or 13th chord.
- These are chords that have 9, 11, or 13 added to the basic chord.
- All these chords are called EXTENSIONS to any major chord, and like any major chord, they are
- PRIMARY DOMINANTS in the major key.
- SECONDARY DOMINANTS in the minor key.

**LIST OF COMMON EXTENSIONS TO MAJOR CHORDS**

<table>
<thead>
<tr>
<th>CHORD</th>
<th>EXTENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>C7</td>
</tr>
<tr>
<td>C7</td>
<td>C9</td>
</tr>
<tr>
<td>C9</td>
<td>C11</td>
</tr>
</tbody>
</table>

**COMMON CHORD PROGRESSIONS**

1. I - IV - I
2. I - VII - I
3. I - ii - I
4. I - iv - I
5. I - VI - I
6. I - ii - V
7. I - VII - V

**COMMON CHORD PROGRESSION IN MAJOR AND MINOR**

1. I - IV - I
2. I - VII - I
3. I - ii - I
4. I - iv - I
5. I - VI - I
6. I - ii - V
7. I - VII - V

**COMMON BAR CHORD PROGRESSIONS**

1. I - IV - I
2. I - VII - I
3. I - ii - I
4. I - iv - I
5. I - VI - I
6. I - ii - V
7. I - VII - V

**CHORD FORMULA**

- **MAJOR**
  - root + 3rd + 5th
- **MINOR**
  - root + 3rd + 5th + b7th
- **MAJOR 7th**
  - root + 3rd + 5th + 7th
- **MINOR 7th**
  - root + 3rd + 5th + b7th + 7th
- **AUGMENTED**
  - root + 3rd + 5th + 7th + b7th
- **DIMINISHED**
  - root + 3rd + 5th + 7th + 11th

**CHORD PROGRESSION PRINCIPLES**

- **BROUGHTED CHORD PRINCIPLES**
  - I - IV - I
  - I - VII - I
  - I - ii - I
  - I - iv - I
  - I - VI - I
  - I - ii - V
  - I - VII - V

**DIATONIC MAJOR SCALE Triads**

- I, IV, VII, ii
- I, IV, V, vi
- I, IV, vi, vii

**DIATONIC MAJOR SCALE THIRDS**

- I, IV, VII, ii
- I, IV, V, vi
- I, IV, vi, vii