

Triads

Chords can have 3 or more notes in it.

Three note chords are called triads.

The 4 Triads- Major, minor, augmented, diminished

Major chord, minor chord, augmented chord and diminished chord each are played with just three notes – hence they are triads.

The major chord

Symbols

C major chord can be written as

1. C major
2. C (*just the note name*)
3. CMA

The major chord is made of the root, major 3rd note and fifth.

Major : Root – major 3rd – 5th

Example: The C major chord

If we want to find the notes of the C major chord,

1. start with C as the root.
2. Find the major 3rd of C (E).
3. Find the fifth of C (G)

C major chord = C E G

Relation between the note sequence and interval names in the chord spelling

If we look at the sequence of notes : C C# D D # E F F# G... etc, the major scale is made of **Root – 5th note of the sequence – 8th note of the sequence.**

The 5th note of the interval sequence is a **major third** note – it makes a major 3rd interval with the root. The 8th note of the sequence of intervals is the **perfect fifth** note – it makes a perfect fifth interval with the root.

For chord naming, it is better to remember the note sequence in terms of the interval naming.

Practice

1. Find the notes of the F major chord using the note sequence, picking the 1st, 5th and 8th notes
2. Find the notes of the F major chord using the interval naming, picking the root, major 3rd and perfect 5th notes
3. Find the notes of E major chord using the interval naming, picking the root, major third and perfect fifth with respect to E.
4. Flatten each note of the F major chord found in (2). See that it has the same notes as E major chord, found in (3)
5. Find the major chord of D# using interval naming sequence.
6. Find the Bb major chord spelling using interval naming sequence
7. Write down the note sequence and corresponding interval naming starting from the note Gb.
8. Find the Gb major chord spelling.

The minor chord

Minor chord : Root – minor 3rd – 5th

Symbols:

B minor chord can be written as :

- B min
- B –
- Bm

Example : the C minor chord

Suppose we want the **C minor chord**.

1. Start with C as the root.
2. Find the minor 3rd of C (Eb), using the interval name sequence and the note sequence.
3. Find the fifth of C (G)

C minor chord = C Eb G

Sequence of notes and interval naming

If we look at **the sequence of notes** : C C# D D # E F F#
G... etc,

Major scale is made of Root – 4th note of the sequence – 8th note of the sequence

4th note of the sequence is the minor third note, 8th note of the sequence is the fifth note – therefore when writing in terms of interval names,

minor chord: root – minor 3rd - fifth

Major and minor – the One Note difference

1. A scale or chord is **minor** if the third note in the associated scale is a minor 3rd.
2. A scale or chord is **major** if the third note in the associated scale is a major 3rd.

The major or minor quality of a chord or scale is entirely dependent on just the third note being major or minor, respectively.

Changing a minor chord to major and vice versa

Any **major chord** is formed of: root - major third - fifth

Any minor chord is formed of : root, minor 3rd, fifth

To get the C minor chord, all we have to do is change the major third note to minor third note.

E.g. C major to minor chord

C major chord has the notes : C E G

C is the root, E is major third, G is fifth

In the C major chord, E is the major third note.

Minor third note is the note is the note just before major third, in the sequence of notes.

One note before E is Eb (or D#).

C minor chord has the notes : C Eb G (same as C D# G)

To get a minor chord from a major chord :

identify the root, major third and fifth of the chord

change the major third note to minor third note

Minor third note is the note is the note just before major third, in the sequence of notes.

To get a major chord from a minor chord :

identify the root, minor third and fifth

change the minor third note to major third.

Major third is the note that comes just after the minor chord note in the sequence of notes.

Practice

1. G# B D# : Take G# as the root, find if B is a major third or minor third. Find that D# is the fifth. Which chord is it?
2. Find the notes of the F minor chord.
3. By shifting the minor third note in the F minor chord to a major 3rd note, find the notes of the F major chord.
4. What are the notes of B major chord. What is the third note. How you will you form the B minor chord from the notes of B major chord?

5. F is the fifth of a major chord. What is the root of the chord? What is the third note of the chord.?How will you change the chord to a minor chord?

The Augmented Chord

Augmented chord : Root - major 3rd - sharp 5th (minor 6th note)

Symbols

D augmented chord can be written as:

- D Aug
- D+
- D⁺

Augmented chord can be remembered as a major chord with the fifth sharpened

Example: the C Augmented chord

Sharpen the fifth of a major chord to get the augmented chord with the same root note.

We know that the C Major chord has the notes : C - E - G (root - major3rd - fifth)

Fifth of C major chord is G. Sharp of G is G#.

So, C Augmented has the notes : C E G#

The Diminished Chord

Diminished chord : Root - minor 3rd - flat 5th (the sharp 4th note)

Symbols

F diminished chord can be written as :

- F dim
- F^o

Diminished chord can be remembered as a minor chord with the fifth flattened.

Example: the C Diminished chord

To get a diminished chord, flatten the fifth note of the minor chord from the same root.

C Minor chord has the notes C Eb G (root - minor 3rd - fifth)

Flatten the fifth; flatten the G to get Gb

The C Diminished chord has the notes : C Eb Gb

Practice

1. What are the notes of D augmented chord?
2. Change the fifth of D augmented chord to get the notes of D major chord
3. When you sharpen the fifth of Cb diminished chord, would you get a Cb major chord or Cb minor chord?
4. What chord do you get when you flatten the C# note of the F# minor chord?
5. What are the notes of G# major chord? Which note of the G# major chord when flattened gives you the G# minor chord?
6. Which note of the G# minor chord when flattened gives the G# diminished chord?
7. How many changes do you have to make to the Bb diminished chord to get the Bb augmented chord? Which are the chords you get in after each change?
8. To get the diminished chord from an augmented chord, you have to sharpen a note and flatten a note – is the statement true or false?
9. The note E is the third note of an augmented chord. If so, which augmented chord is it? (options : Bb+, Cb aug, C augmented)
10. Which diminished chord has the note E as the third note?

Triads from each note of the major scale

Take the major scale: C - D - E - F - G - A - B - C

Form a triad chord from C by choosing notes from the scale :

1. Start from C
2. skip D
3. take E
4. skip F
5. take G

We get the notes C E G which forms the C major chord.

Similarly we build a triad starting from each note of the scale taking two more notes from the scale, skipping a note in between.

These chords are called **diatonic chords** - meaning 'within the scale'

Diatonic chords of C major scale

I	C-E-G 1-3-5	C maj
ii	D-F-A 1-b3-5	D min
iii	E-G-B 1-b3-5	E min
IV	F-A-C 1-3-5	F maj
V	G-B-D 1-3-5	G maj
vi	A-C-E 1-b3-5	A min
vii	B-D-F 1-b3-b5	B dim

The chords found above are the 'safe chords' which you can play for songs in the C major scale.

Try playing those chords. They are useful to play a large number of songs. Once you are familiar with them, you can transpose them to any other root - D or G or F# and use for songs in those roots.

Practice:

1. verify that D F A forms a minor chord. (check if the third note is a minor or a major 3rd)
2. verify that B D F is a diminished triad
3. write down the E major scale (first write down the sequence from E to E, write down the intervals associated with each note, see the interval formula for major scale, choose the notes based on the formula).
4. Find the diatonic triads of the E major scale by starting from each note, taking two more notes in the scale skipping one note in between.

5. Which major scale will have Em F#m and G as diatonic chords?
6. Which major scale will have Dm C B flat and Am as diatonic chords?

Practical tips to find chord notes

What are the notes of the C major chord?

C E and G.

How to find the notes of a major triad, in this case C major triad?

The spelling of a major chord is root - major 3rd note - fifth note.

Finding the major 3rd note

Count through the note sequence to find out which position is the major 3rd notes :

Root - minor 2nd - major 2nd - minor 3rd - major 3rd

Major 3rd note is the 5th note when you include the root.

Count on your fingers : root -1, minor 2nd - 2, major 2nd -3, minor 3rd -4, major 3rd - 5

If you start from your thumb as root, on your little finger you have the major 3rd note.

Now count on the sequence of notes to find out which is the fifth note from C, including the root C.

C - C# - D - D# - E (5)

So we find that E is the major 3rd note of C.

The fifth note

When C is the root G is the fifth. How?

1. We can either count from the root through minor 2nd major 2nd etc till we reach the 5th note of the scale - which is the 8th note in the note sequence (C C# ...F# G)

or

2. we can remember what is called the **Cycle of Fifths**.

The circle of fifths

Since the relation of 5ths appears frequently in harmony and chord construction, the circle of fifths is a basic study material for students of music theory. The circle also has relevance associated with the number of sharps and flats in a scale when writing notation.

It visually shows the 5th note relationships when moving clock wise. Fifth of C is G Fifth of G is D etc

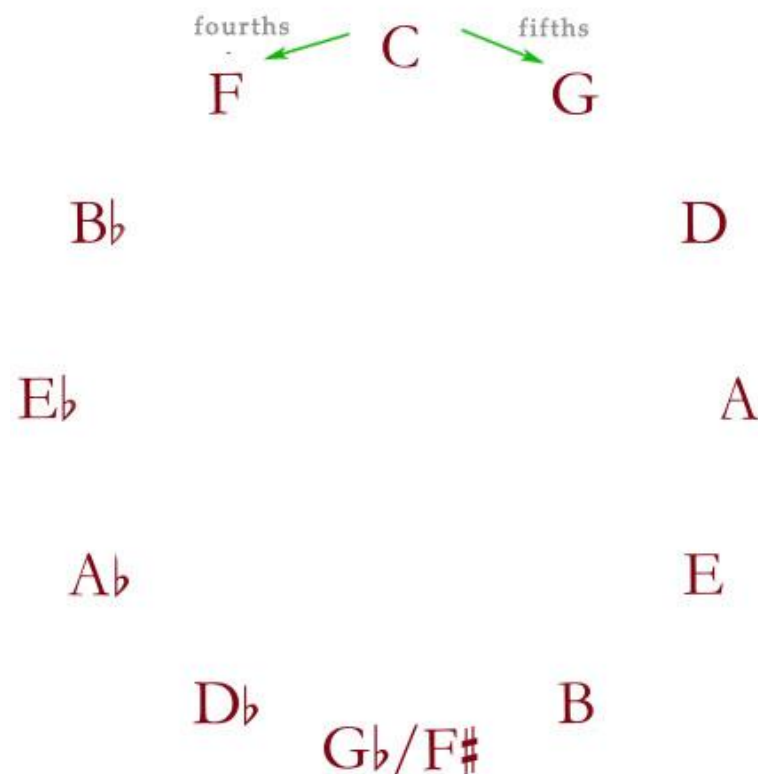
When moving counter clockwise, the relation is one of fourths - F is the perfect 4th of C, Bb is the perfect 4th of F etc.

Thinking in groups of two

One can start seeing the notes as pairs of intervals.

After C, the root, think of

- C# and D both as seconds, one minor and major.
- Then the pair of thirds - minor and major.
- Then the pair of fourths - perfect and sharp
- Only one fifth



- Then the pair of sixths - minor and major
- Then the pair of sevenths - minor and major

Relative major and minor

A minor is the relative minor of C major.

Within the C major scale, A note comes in the 6th position. C D E F G A B C

The relative minor of a major scale is the minor scale from the 6th note of the major scale.

The relative minor chord is the minor chord from the 6th position of the major scale.

Remember that... as a definition.

Examples of relative minor and major relations:

If you want the relative minor of D, find the 6th note in the D major scale, and play the minor chord with the 6th note as root.

The 6th note of D major scale is B. Bm is the relative minor chord of D major.

Why learn relative minor and major?

Increasing chord options using relative relationships

Suppose you have the chords C G F for a scale. You can try using Am, Em and Dm which are the relative minors, for the scale.

When playing chords for a song, if you are playing the major chord and want a change with least change of notes, the relative minor is the first option to look for.

To decide if a melody is major or minor

The notes of a major scale are same for the natural minor relative to the major scale. The minor scale starts from the 6th position. Knowing this is important to check if a melody with a given set of notes is in a major or minor scale.

Use same chords for major and relative minor

If you know the chords for the D major scale, you can play any song in the B minor scale too, because they are relative major and minor scales and share the diatonic chords.

Just to understand music better

Beyond the obvious practical uses, it is always good to know how all the different parts of music are interconnected.

How do you find the 6th note fast?

Example 1 If you have found out the D major chord, you will know that the fifth note is A.

The 6th note of the D major scale is a major 6th note, which is a tone away from the fifth, two half steps away from the fifth, two frets to the right of the fifth, two keys to the right of the fifth.

Two notes from A is B. relative minor of D is Bm

Example 2 Relative minor of C# major

What is the 6th note in the C# major scale?

1. you can count to get to the 6th of C# as A# (count notes through the sequence till major 6th)

OR

2. remember 6th of C is A, so 6th of C# should be A#

OR

3. use relationships as shown below :

a) What is the fifth of C : G

b) What is 6th of C : G + 2 notes : A

c) C# is C raised by one half step

d) Fifth of C# will be 6th of C, raised by one halfstep : raise A by a half step to get A #

Know a few fifths and 6ths and other relationships.

Then you can extend them to their flats and sharps etc. move the root by a minor 3rd, the 7th also moves by a minor 3rd. move the root by a 4th, the 6th or 7th or 2nd also moves by the distance of a 4th.

Using the same chords for major and minor scale

The same chords can be used for songs on the C major scale and the Am scale.

The Am scale will have E major chord in addition to the diatonic chords of C.

In effect the A natural minor scale is changed to the A harmonic minor with the introduction of the G# note.

The G# note in the E major chord makes it a major chord. The change from E minor to E major chord is brought about by that single note addition. This addition of G# makes the 7th of A minor scale a major seventh interval, hence making the A harmonic minor scale.

The V to i motion is an important tension release motion present in almost all styles of music. For this to be effective, the V has to be a major chord or even better, a dominant chord. The major 3rd and minor 7th in the

chord forms a triton interval, which causes the beautiful tension.

To get the major 3rd for the V chord is the reason we add the extra note or change G to G# in the A minor chord to get A harmonic minor chord.

Practice

1. The A minor scale is the relative minor scale of C. To play songs in Am, you can use the same diatonic chords as of C, though you may find that the E major chord is included (in addition to Em or instead of Eminor) since it is the Vth chord of Am.
 - a. Which major scale has Bm as its relative minor scale?
 - b. What are the safe chords for a song in the B minor scale? Which extra major chord could be used?

The Suspended chords

The 'sus' in C sus 2 or F sus 6 or D sus 4 is short for 'Suspended'.

In a major or minor chord, instead of the third note, if we use 2nd, 4th or 6th note, we get the corresponding suspended chord.

Note : 'replacing the third note' is the most used definition for a suspended chord. But, 3rd and 4th notes have been used in the same chord in published music, where the chord has been noted as a suspended chord. (Mark Levine Jazz Theory Book p.g.46)

Major, minor and suspended

Below is the spelling for the three suspended chords. Compare it with the major and minor chord spellings.

Suspended chords

sus 2 : Root - 2nd - fifth

sus 4 : Root - 4th - fifth

sus 6 : Root - 6th - fifth

Major and minor chord

Major chord : root - major 3rd - fifth

Minor chord : root - minor 3rd - fifth

Sus 4th

When you have to find the sus4th starting from a major chord triad, all you have to do is, shift the major third note up

- by a half step
- up by one fret on the guitar
- to the next keyboard key on the right.

F major chord has the notes F A C

How will you get F sus 4th from the major chord?

F is the root, C is the 5th, A is the third.

To get F sus 4th, we shift the A one semi tone or half step up to A#

Sus 4ths usually won't have the third. Earlier the definition of suspended chords was – in a major or minor chord triad, instead of the third, play 2nd 4th or 6th and you get sus 2nd sus 4th or sus 6th respectively. But in the past few decades, musicians have used 4th note over major chord triads and therefore the 'remove the 3rd' part is no more strict.

I still play the sus chord without the 3rd, like a triad. If I play the third along with the sus6th chord, I call it a major 6th chord, where the major 6th note is added to the major triad – a 4 note chord.

When we play the major chord triad along with the second note (major 2nd) i find it easier to refer to the chord as the 'added 9th chord', instead of suspended chord with a major 2nd. C major triad + the D note (major 2nd) gives us the C added 9th.

Also, you have to decide if playing the 3rd and 4th note together can sound right in your situation and if you

are in the right genre. Earlier, the 4th note was considered an avoid note in the major scale harmony. For example when playing the C major chord, it was suggested to not play the F note over it.

We will stick to the definition of suspended chord being the third substituted by a 2nd 3rd or 6th.

Sus 4th – the most popular suspended

Sus 4th is probably the most popular suspended chord.

Interestingly, sus 4th can also replace the dominant seventh chord in some chord progressions.

Sting song 'You remember me' comes to mind as an example where the sus 4th chord takes a centre stage.

You could use the sus 4th chord when you want to give importance to the perfect 4th note (shuddha madhyamam in Carnatic system.)

Sus2

suspended 2 is different from added 9th because added 9th is usually seen as adding the 2nd note to a major or

minor chord, while sus 2 usually will not have the third played when the 2nd note is played.

Sus 2 chord could be an easy variation to the minor chord. When you want a change from the sound of the minor, but want to stay in the same pitch, try the sus2 chord. (another usual thing done : suppose you are playing the Am. Change to F major or FM7 for a dramatic variation. Of course, check if the change suits what you want, before performing.)

Sus 6th

To get sus 6th, instead of the third, play the 6th note. 6th note can be found by moving two frets up from the fifth. A tone from the 5th note. Instead of the third in a major chord, play the note two half steps up from the fifth of the major chord, to get sus6th chord.

F# major chord has the notes F# A# C#

To get the sus6th of F#, avoid the third note, find the 6th note.

Third note is A# and the 6th note is two semi tones up from C# the fifth - which is D#

So play F# C# D# and you have the F#Sus6th chord.

Another example : if we want the Csus6th chord, start with a C major or C minor chord.

C major chord : C E G (root - major third - fifth)

C minor chord : C Eb G (root - minor 3rd - fifth)

A is the 6th note for C root.

Instead of the third note - E or Eb - in the above chords, play A note to get

C sus 6 chord : C G A

Sus fourth and suspended 2nd with the same notes

C sus 2 : C D G

When G is the root, D is the fifth and C is the 4th – the notes of G sus 4

So Csus2 has the same notes as G sus 4th.

Suspended 2nd chord has the same notes as suspended 4th chord from the fifth of the original chord.

G is fifth of C.

One more example :

D sus 2 has the notes : D(root) E(2nd) A(5th)

Fifth of D is A.

A sus 4th has the notes : A(root) D(4th) E(fifth)

Is suspended chord a major or minor chord?

As mentioned before, traditionally suspended chords were not supposed to have the third note. Since the third

note decides if a chord is major or minor, suspended chords did not have to be mentioned as minor or major. Even now, when third may be used in a suspended chord, we don't have to mention major or minor because suspended 2 4 or 6 is like a definition. When asked to play a suspended chord, just look for the number that comes after, play the corresponding note, avoid the third or not upto how you want the sound to be.

Relations between the triad chords – revisit

The minor to major switch

Let us take C minor chord for this example.

What is the spelling? Root - minor 3rd - fifth

What is the fifth of C. It is G. (know by heart that the fifth of C is G - later if you want fifth of C# you will know it is G#, fifth of Cb is Gb etc. Remember a few frequently used ones.)

Minor 3rd of C? Count. Root, minor 2nd, major 2nd, minor 3rd. That is C C# D D#. D# is the minor 3rd note with respect to C.

To find the major chord, only difference is that the third will be a major third instead of minor third. We count C C# D D# E. E is the major third note.

The diminished chord and the augmented chord

Diminished from minor chord

The diminished chord is a minor chord with the 5th flattened.

- a) You have the **C minor chord: C Eb G**
- b) Flatten the fifth (G to Gb) to get the **C diminished chord : C Eb Gb.**

Augmented from major chord

The augmented chord is a major chord with the 5th sharpened.

C major chord : C E G

C augmented : C E G#

Remember this relationship that the diminished and augmented chords have with minor and major chords respectively. This makes life easier because you can always **derive the diminished or augmented** from its

minor or major chord and not have to remember them separately.

On the guitar or piano, you will see how the note can be shifted to the next fret or key to get the chords from minor or major. If we want to play on the instrument, remember these relationships on the instrument, visually and physically.

Moving between the triad chords

Major chord - sharpen the fifth - gives augmented

Major chord - flatten the third - gives minor chord

Minor chord - flatten the fifth - gives diminished chord

The minor chord and the sus 2

B minor chord has the notes : B D F# (root - minor 3rd - fifth)

B sus 2 has the intervals : Root - major 2nd - fifth

To get sus 2, we need to change the minor 3rd note to major 2nd note

Look at the note sequence : Root - minor 2nd - major 2nd - minor 3rd - major 3rd - perfect 4th ...

Major 2nd note comes just before the minor 3rd note in the sequence.

When B is the root note : B C C# D D# E...

D is the minor 3rd, C# is the major 2nd.

B sus 2 : B C# F#

The major chord and the suspended 4th

C major chord has the notes C E G C suspended 4th

chord has the notes C F G

Just one note difference. E is changed to F, the immediate next note.

The major third in the major chord when changed to the immediate next note - perfect 4th - we get the suspended fourth chord from the same root.

F major chord : F A C

F sus 4th : F A# C

Any major chord, if you can find the third note, shift it to the immediate next note in the sequence of notes, and we have the suspended 4th chord.