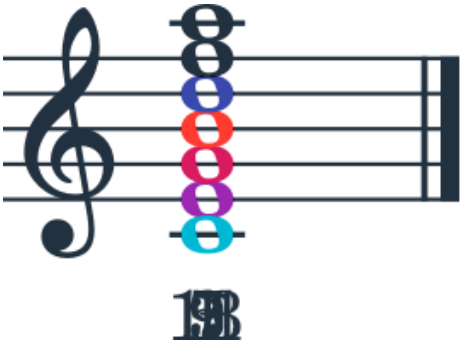Tissimo

LISTEN
Scan to hear every example
tissimo.co/worksheets/extended-chords-stacked-thirds

Keep stacking the thirds

A triad is two thirds. A seventh chord adds a third. Keep going and you reach the **ninth**, **eleventh**, and **thirteenth** — each a third above the previous one, each named by its interval above the root.

THE FULL TERTIAN STACK ON C



C E G B D F A — every other letter

Stack **every other letter** starting from C and you get seven notes: **C–E–G–B–D–F–A**. The gap from one note to the next is always a **third** (you skip a letter each time).

The numbers name each note by its distance above the root. The 9th, 11th, and 13th are simply the 2nd, 4th, and 6th raised by an octave: **9 = octave + 2nd** (14 semitones), **11 = octave + 4th** (17 semitones), **13 = octave + 6th** (21 semitones).

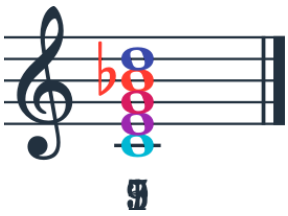
They reduce to the same pitch class: **9 → degree 2**, **11 → degree 4**, **13 → degree 6** — a D, F, and A, wherever they sound.

1	**root**	C
3	**third**	E
5	**fifth**	G
7	**seventh**	B (or B♭)
9	**ninth**	D — 14 semitones, reduces to degree 2
11	**eleventh**	F — 17 semitones, reduces to degree 4
13	**thirteenth**	A — 21 semitones, reduces to degree 6

THREE NINTH-CHORD QUALITIES ON C

C9

dominant ninth

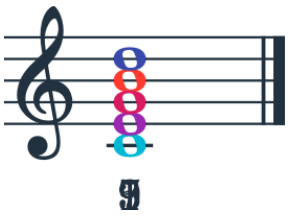


C – E – G – B♭ – D

Major triad + **minor 7th** (B♭) + major 9th. The symbol **C9** always implies a 7th: this is a five-note chord.

Cmaj9

major ninth

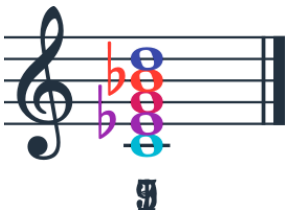


C – E – G – B – D

Major triad + **major 7th** (B♮) + major 9th. The **maj** in the symbol refers to that major 7th.

Cm9

minor ninth



C – E♭ – G – B♭ – D

Minor triad (E♭) + **minor 7th** (B♭) + major 9th. Both the 3rd and 7th are lowered.

9th chord vs add9. A ninth chord *contains* the 7th (C9 = five notes). An **add9** triad adds the 9th directly to the triad with *no* 7th (Cadd9 = C E G D, four notes). The chord symbol tells you which: **C9** includes the 7th; **Cadd9** does not.

WHICH NOTES ARE NORMALLY OMITTED — AND WHY

DOMINANT ELEVENTH (C11)

The full stack C–E–G–B♭–D–**F** clashes: the **major 3rd** (E) and the **11th** (F) sit only a minor 9th apart. Result: a harsh rub. The standard fix is to **omit the 3rd**, leaving the chord in a suspended-style voicing (also called the no-3 or sus form).

DOMINANT THIRTEENTH (C13)

The full stack C–E–G–B♭–D–F–**A** has seven notes — too many to voice clearly. The **11th (F)** is normally omitted to avoid the same 3rd/11th clash, and the **5th (G)** is often dropped too. The practical core: **C–E–B♭–D–A** (root, 3rd, 7th, 9th, 13th).

Try it Cover the degree-label column and read the stack aloud from bottom to top: **C, E, G, B, D, F, A.** Then name the interval each note makes with C (in semitones: 0, 4, 7, 11, 14, 17, 21). Work down from the 13th: which degree does it collapse to? See **Exercise 190** to spell and identify extended chords on other roots.

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