

Seventh chords come in five flavors:

Dominant 7th on D
 Major 7th on D
 minor 7th on D
 half-diminished 7th on D (ø)
 diminished 7th on D (o)

they are constructed as follows:	Dominant: M m m	half-diminished: m m M	← qualities of thirds making up the chord
	Major: M m M	diminished: m m m	
	minor: m M m		

Dominant 7th chords

can be on a note: $\begin{matrix} \circ \\ \circ \\ \circ \\ \circ \end{matrix} \begin{matrix} 7 \\ m \\ 3 \end{matrix}$ or in a key: $\begin{matrix} \circ \\ \circ \\ \circ \\ \circ \end{matrix} \begin{matrix} 7 \\ m \\ 3 \end{matrix}$ if it's in a key, it starts on the fifth step (D Maj → root is A, C minor → root is G).

Dominant 7th on D
 Dominant 7th in D Major

all 7th chords except Dominant:

can be on a note only. $\begin{matrix} \circ \\ \circ \\ \circ \\ \circ \end{matrix}$ $\begin{matrix} \circ \\ \circ \\ \circ \\ \circ \end{matrix}$ $\begin{matrix} \circ \\ \circ \\ \circ \\ \circ \end{matrix}$ none of these are V^7 chords. only the Dominant chord is a V^7 chord, all other seventh chords are described with their root & quality.

minor 7th chord on D
 d minor seventh chord
 d min. 7

inversions:

when looking for the inversion in a passage, just like with normal triads, the bottom note in the bass clef determines the inversion.

Root, 7, or $\frac{7}{5}$
 First inversion, $\frac{6}{5}$, or $\frac{6}{3}$
 Second inversion, $\frac{4}{3}$, or $\frac{6}{4}$
 Third inversion, 2, or $\frac{6}{2}$