

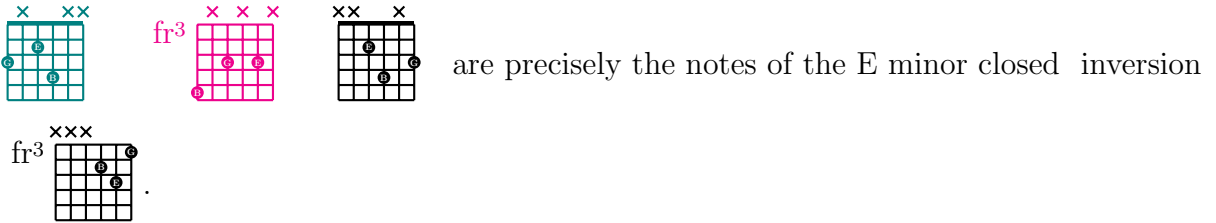
Pitch Equivalent Fingerings of the E Minor Open Triads

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Remarks

The following is a 5×4 table of some commonly used voicings of the E minor open triads¹ on a 21 fret guitar. Let $e(i, j)$ be the chord in row i and column j , so that the top left and bottom right chords of the table will be denoted $e(1, 1)$ and $e(5, 4)$ respectively. Notice that:

1. Chords on a given row fall in roughly the same range of frets.
2. Each row contains a root, first inversion and second inversion triad of the open E minor. The fourth chord is an upward pitch translation by one octave of the first chord. Thus, for example, $e(3, 4)$ is one octave higher than $e(3, 1)$ and of the same inversion.
3. **Pitch order** is constant on fingerings of the same color (located on the diagonals). Since there are seven diagonals in the table, there are exactly seven pitch classes. It is natural to refer to fingerings of the same color as being *pitch equivalent*. Clearly all fingerings in a given pitch class will have the same inversion.
4. The highest notes in each of the first three chords of a given row, together, form an inversion of one of the three E minor closed triads located on the first three strings. For example, the highest notes of the first three open chords in row two, namely



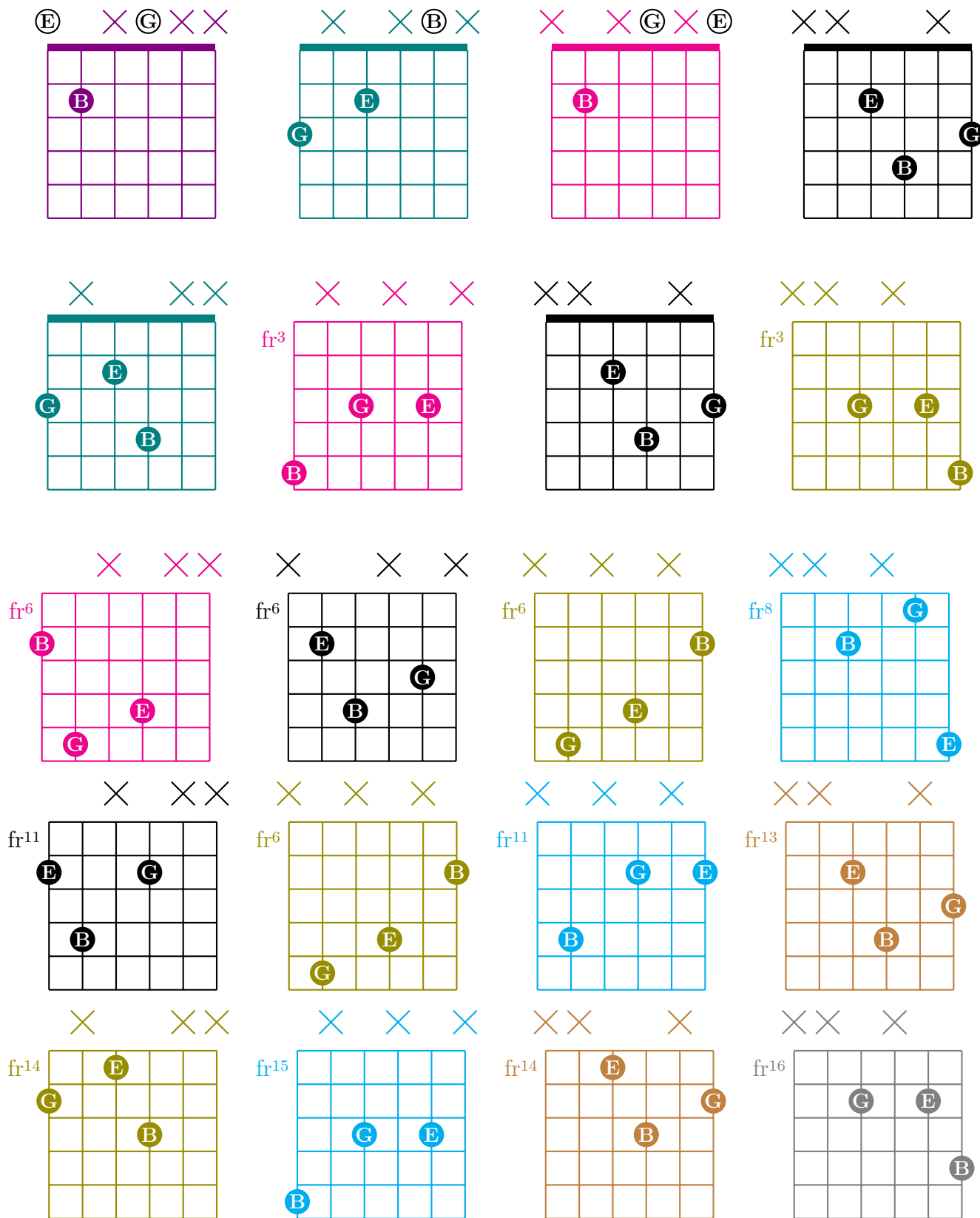
Moreover, different rows of the table generate different E minor closed triads in this manner.

5. Conversely, each E minor closed triad on the first three strings generates a unique triple of open E minor triads whose highest notes comprise the closed triad. Thus there is a one to one correspondence between E minor closed triads on the first three strings and triples of E minor open triads. Knowledge of this correspondence greatly facilitates memorization of the open triads.
6. Since there are only three odd permutations of three notes, the chords in row $i + 3$ will be an octave higher than in row i and of the same inversion.
7. The fingerings of minor triads in any key can now be obtained by a pitch translation of the entire table.

¹Please refer to the article [Guitar Chord Sequences Totally Ordered by Pitch](#) for terminology.

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Some Suggestions for Practice

The chords can be practised

1. One row at a time (so as to remain within a given fret range). Before and after each row, the closed chord determined by the highest notes of the three open chords can also be played.
2. One column at a time.
3. Along paths (of length 7) from $e(5, 4)$ to $e(1, 1)$. There are 35 such paths.
4. Interleaved with other chords of the scale E minor.