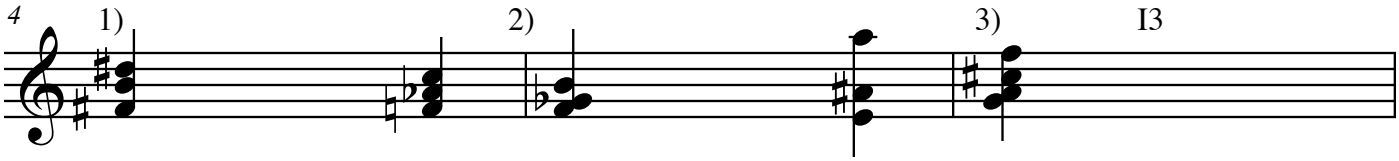
301 Set Theory Practice Exam

A) Pitch Inversions. Assume C4=0

For the following, do one of the following: given two chords, find the pitch inversion that relates them; or, given a chord and a pitch inversion, find the inversion of the chord.

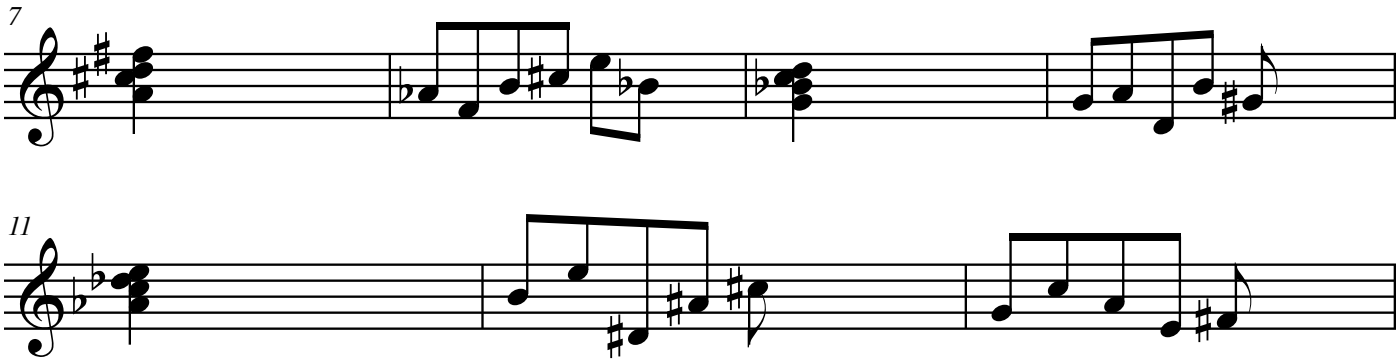
B) Pitch-Class Inversions. Assume C=0

For the following, do one of the following: given two chords, find the pitch-class inversion that relates them; or, given a chord and a pitch-class inversion, find the inversion of the chord (of course, any registral distribution of the correct pitch classes will be considered correct.



C) Set Class and Interval Vector.

For each of the following pitch class sets, find the set class name (best normal order) and calculate the interval vector. Which sets are Z related?



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D) Invariant Subsets.

For the following pitch-class set, find three pitch-class transformations (inversions or transpositions) that result in invariant subsets of cardinality 3 or higher (trichords or larger). Name the transformation, write the resulting chord, and draw arrows pointing to the invariant pitch classes.