Normal form - to compare two sets, first make sure they are both in normal form

normal form = ascending order with the smallest interval between first and last pitches

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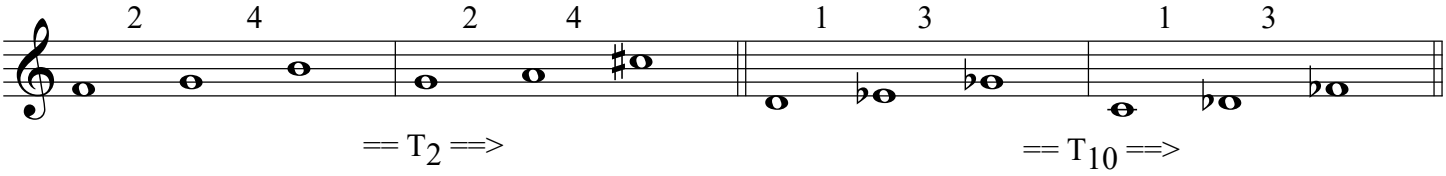
Transposition - two sets are *transpositions* of each other if they have the same intervals in the ***same order***



== T_2 ==>

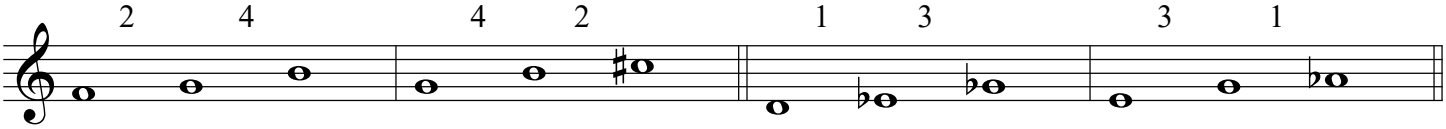
(transposed up 2 semitones)

== T_{10} ==>

(transposed "up" 10 semitones)*

* the T number only works in an upwards / positive / clockwise direction [so, not T_{-2}]

Inversion - two sets are *inversions* of each other if the have the same intervals in the ***opposite order***



== T_nI ==>

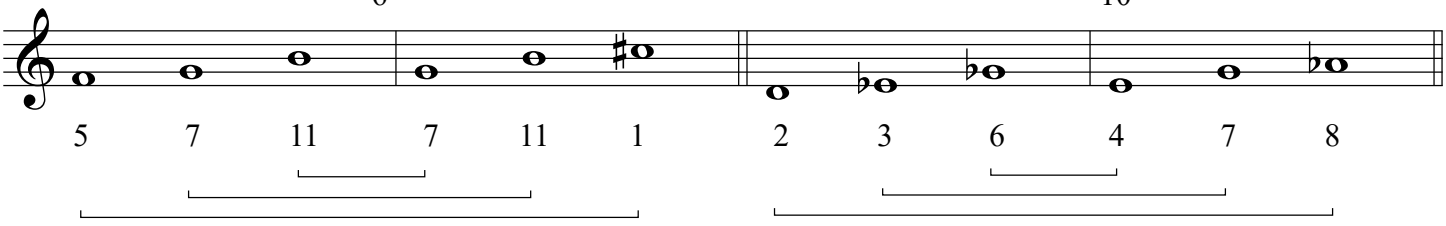
== T_nI ==>

n is the "index of inversion,"which can be determined by adding up "mirrored" pairs of pitch class numbers

Example:

== T_6I ==>

== $T_{10}I$ ==>



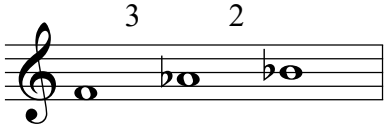
5+1 = 6
7+11 = 18 (mod 12 = 6)
11+ 7 = 18 (mod 12 = 6)

n = 6

2 + 8 = 10
3 + 7 = 10
6 + 4 = 10

n = 10

Prime form: to determine the *prime form* for a set using intervals (rather than a clockface):



1. Put the set in normal form and determine the intervals: 3 2
2. Reverse the order if it will put the smallest intervals first: 2 3
3. Starting on 0, add the interval numbers successively: 0 + 2 = 2 + 3 = 5

prime form = (0 2 5)