

# Interval Vectors

An **interval class** refers to the number of half steps in an interval.

If the interval is larger than an octave (i.e., a compound interval), reduce it to a simple interval (<octave).

If the interval is larger than 6 half steps (tritone), invert it at the octave.

*Enharmonic spellings are not a consideration here, only the number of half steps.*

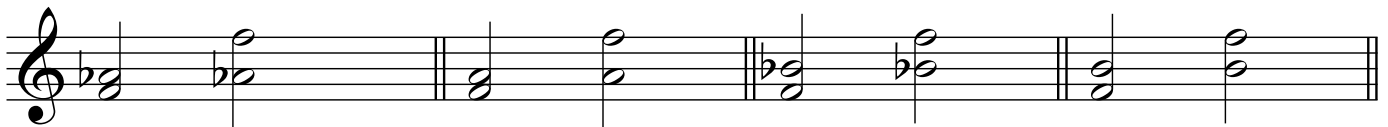
An **interval vector** is a catalog of the interval classes present in a given sonority.



Interval class 0  
(Not included in vector)  
0 or 12 half steps

Interval class 1  
1 or 11 half steps

Interval class 2  
2 or 10 half steps



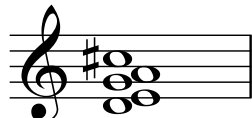
Interval class 3  
3 or 9 half steps

Interval class 4  
4 or 8 half steps

Interval class 5  
5 or 7 half steps

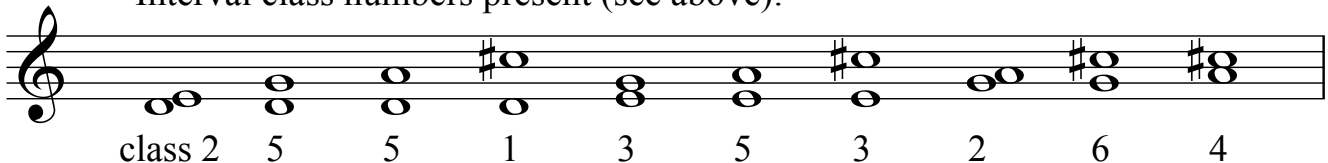
Interval class 6  
6 half steps

## Sample interval vector example:



Given sonority

Interval class numbers present (see above):



Adding up, we have 1 interval class 1, 2 interval class 2 intervals, 2 interval class 3 intervals, 1 interval class 4 interval, 3 interval class 5 intervals, and 1 interval class 6 interval.

So the interval vector for the given sonority is [122131].