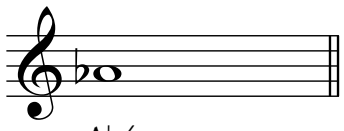
Set Theory Quick Reference Sheet

Pitch

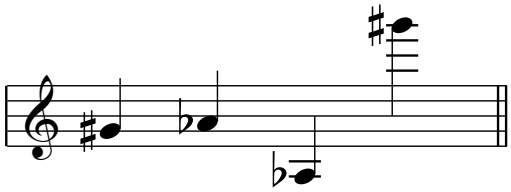
A specific frequency, in a specific register.



A♭4

Pitch class (pc)

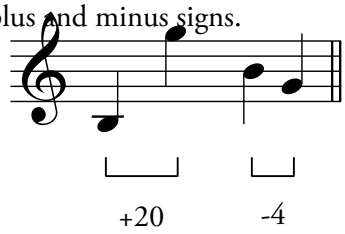
A group of pitches related by octave equivalence and/or enharmonic equivalence. Summarized with an integer, from 0 through 11.



pitch:	G♯4	A♭4	A♭3	G♯6
pitch class:	8	8	8	8

ordered pitch interval

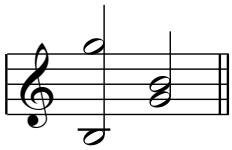
The number of semitones from one pitch to the next. Direction is indicated with plus and minus signs.



+20 -4

unordered pitch interval (ip)

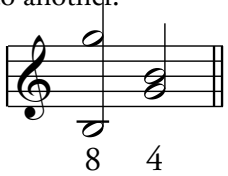
The number of semitones fromone pitch to the next, with no regard to order.



20 4

ordered pc interval

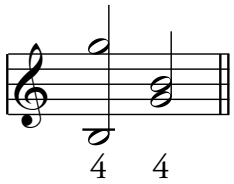
The number of ascending semitones from one pc to another.



8 4

interval class (IC)

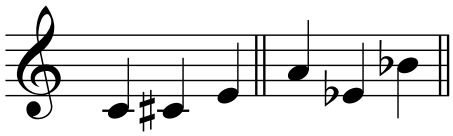
The smallest number of semitones possible between two pcs. ICs range from 0 to 6.



4 4

pitch class set (pc set)

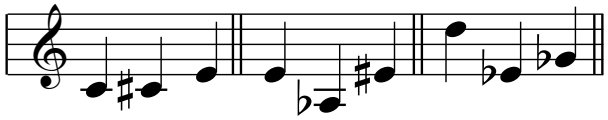
An unordered collection of pcs. Pc sets are often given in **normal form,** which lists the pcs in the most compact order, ascending.



[0, 1, 4] [9, 10, 3]

set class (sc)

A group of pc sets that are all related by transposition or inversion. Set classes are named by their **prime form:** the pc set that starts on 0 and keeps the set most closely packed to the left.



normal form (pc set):	[0, 1, 4]	[4, 5, 8]	[2, 3, 6]
prime form (set class):	(014)	(014)	(014)