

The Key Signatures

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The major scale has half steps at III/IV and VII/I. The natural minor scale has half steps at II/III and V/VI. Key signatures are a way to preserve these whole step/half step arrangements when starting from different keys. A key signature is a set of accidentals (sharps and flats) written at the beginning of each line and controlling each bar of that line, unless otherwise specified. Often, the key signature remains the same for an entire piece of music.

A scale that starts on C (C D E F G A B C) has the exact layout of a major scale. No accidentals are needed to conform the scale to the pattern of the major scale, and the key signature of C major is simply nothing at all. Likewise, a scale that starts on A (A B C D E F G A) has the exact layout of a natural minor scale. Therefore, the key signature of A Minor is the same as that of C Major: nothing.

That's not true of scales starting on other keys. A scale that starts on G (G A B C D E F G) has half steps at III/IV and VI/VII. To conform it to the major scale pattern, we need to raise the VII (the F) by a half step. The resulting scale (G A B C D E F# G) has the correct pattern. Therefore, the key signature of G Major is F#.

Likewise, a scale that starts on E (E F G A B C D E) has the half steps at I/II and V/VI. To conform it to the natural minor scale pattern, we need to raise the II (the F) by a half step. The resulting scale (E F# G A B C D E) has the correct pattern. Therefore, the key signature of E Minor is the same as that of G Major: F#.

Each major key has exactly one natural minor key that has the same key signature, and vice versa. They're called "parallel minor" and "parallel major." **The parallel minor is always a minor third below the parallel major.**

Here are all the key signatures. The first letter is the major key, and the second letter is the minor key. Some key signatures are enharmonic (different notes represented by the same key on a keyboard). They're designated in the chart by "=". Key signatures with more than seven accidentals are not used.

Ascending Chromatically:

C/A: nothing	
C#/A#: 7 sharps	(F C G D A E B) (= Db/Bb)
Db/Bb: 5 flats	(B E A D G) (= C#/A#)
D/B: 2 sharps	(F C)
Eb/C: 3 flats	(B E A)
E/C#: 4 sharps	(F C G D)
F/D: 1 flat	(B)
F#/D#: 6 sharps	(F C G D A E) (= Gb/Eb)
Gb/Eb: 6 flats	(B E A D G C) (= F#/D#)
G/E: 1 sharp	(F)
Ab/F: 4 flats	(B E A D)
A/F#: 3 sharps	(F C G)
Bb/G: 2 flats	(B E)
B/G#: 5 sharps	(F C G D A) (= Cb/Ab)
Cb/Ab: 7 flats	(B E A D G C F) (= B/G#)

Ascending by Fifths:

C/A: nothing	
G/E: 1 sharp	(F)
D/B: 2 sharps	(F C)
A/F#: 3 sharps	(F C G)
E/C#: 4 sharps	(F C G D)
B/G#: 5 sharps	(F C G D A) (= Cb/Ab)
F#/D#: 6 sharps	(F C G D A E) (= Gb/Eb)
C#/A#: 7 sharps	(F C G D A E B) (= Db/Bb)
Cb/Ab: 7 flats	(B E A D G C F) (= B/G#)
Gb/Eb: 6 flats	(B E A D G C) (= F#/D#)
Db/Bb: 5 flats	(B E A D G) (= C#/A#)
Ab/F: 4 flats	(B E A D)
Eb/C: 3 flats	(B E A)
Bb/G: 2 flats	(B E)
F/D: 1 flat	(B)

NOTE: The sharps are arranged in ascending fifths (F C G D A E B). The flats are arranged in descending fifths (B E A D G C F). So are the key signatures: G D A E B F# C# for the sharps, and F Bb Eb Ab Db Gb Cb for the flats. Memorizing the key signatures is easy: just remember **F C G D A E B goes up, B E A D G C F goes down.**