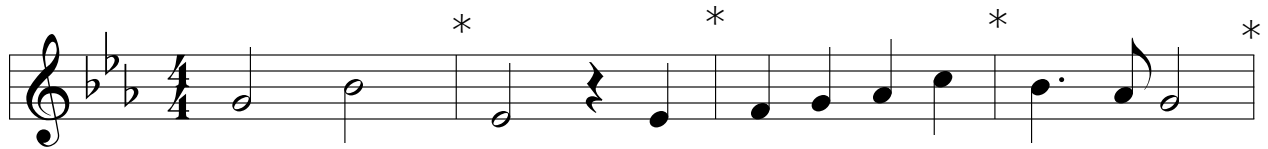


Unit 13 ~ Time Signatures

Music scores usually have vertical lines that divide the staff into small, regular sections. These sections are called 'bars', or 'measures'. The following excerpt from Mozart's opera 'The Magic Flute' contains 4 bars. I have indicated the vertical lines with asterisks:



You'll notice on the left, immediately after the key signature, that there are two numbers, one above the other. This pair of numbers is called the TIME SIGNATURE.

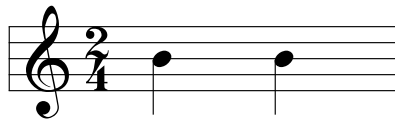
The top number tells you how many beats there are in each bar. The bottom number tells you how long each beat is. In our example above, the time signature is 4/4. This means there are four beats in the bar, and each beat is one quarter note long. You can think of the time signature mathematically, like this: $4 \times 1/4$.

The majority of time signatures are DUPLÉ, TRIPLE, or QUADRUPLE. Most time signatures also fall into one of two categories: SIMPLE time and COMPOUND time.

Let's consider simple time first. Later in this unit we'll look at compound time.

Simple Duple Time

Duple time means there are two beat in the bar. In simple duple time, the top number of the time signature is always 2. The most frequently used simple duple times are 2/4 and 2/2:



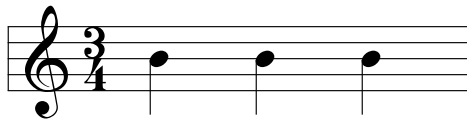
This measure is in 2/4. The top number is 2 so that means 2 notes per bar. The bottom number is 4, so that means each of the 2 beats in a 1/4 note long.



This measure is in 2/2. The top number tells us we have 2 beats per bar. The bottom number tells us each beat is a 1/2 note long.

Simple Triple Time

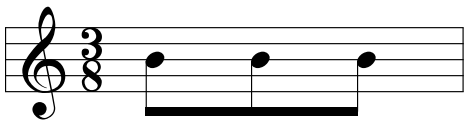
Triple time means that there are 3 beats per bar. In simple triple time signatures, the top number is always 3. Common possibilities include 3/4, 3/2 and 3/8:



This bar is in 3/4 time. The time signature tells us we have 3 beats per bar, and each beat is a quarter-note.



This is a bar of 3/2. There are 3 beats in the bar, and each beat is a half-note long.



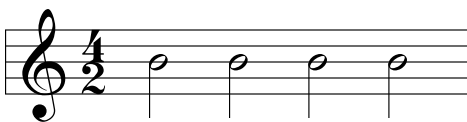
This bar is in 3/8. There are three eighth-notes per measure.

Simple Quadruple Time

In simple quadruple time signatures, the top number of the time signature is always 4. The most common example is 4/4. In fact, 4/4 is such a common time signature that it is also known as 'common time' and instead of writing "4/4", music scores sometimes just have a 'c'.



This bar is in 4/4 time. There are 4 beats in the bar, and each is a 1/4 note long. 4/4 time is also known as 'common time'.



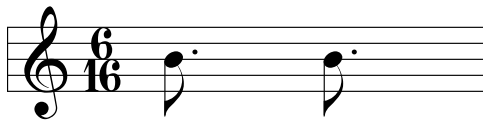
This bar is in 4/2. There are 4 beats per bar, and each is a half-note long.

Compound Time Signatures

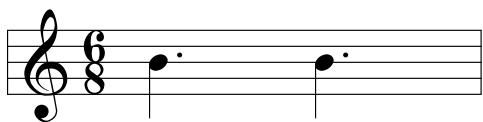
Like simple time signatures, compound time signatures are either duple, triple, or quadruple. That means they have either 2, 3, or 4 beats per bar. The difference between compound and simple times is that in compound time, each beat of the bar is a DOTTED note.

Compound Duple Time

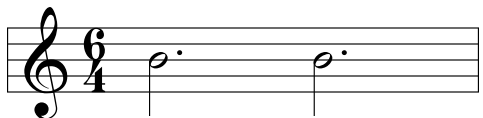
Compound duple time signatures have 2 beats per bar. The top number is always 6. This might be a bit confusing: I've said up to now that the top number tells you how many beats there are in the bar, so if there are 2 beats per bar, how can the top number be 6? The reason for this is that if we DID put 2 as the top number, there is no whole number we could use as the bottom number; we would have to use a fraction. So the convention is to use 6 as the top number, rather than 2, even though pieces in these time signatures will feel and sound like there are 2 beats in the bar.



This bar is 6/16. The top number is 6; there are 2 beats per bar. Each beat is worth a dotted eighth-note.



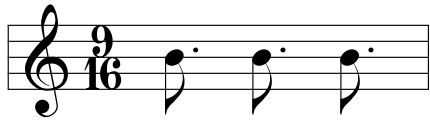
This is 6/8 time. This time signature is probably the most common compound time signature. There are 2 beats in the bar, and each is a dotted quarter-note.



6/4 time means there are two beats per bar, and each beat is a dotted half-note.

Compound Triple Time

The top number of compound triple time signatures is 9. These time signatures have 3 beats per bar:



In 9/16 there are 3 beats per bar. Each beat is a dotted eighth-note.



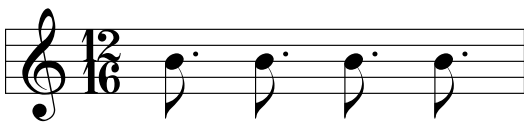
In 9/8, each beat is a dotted quarter-note long.



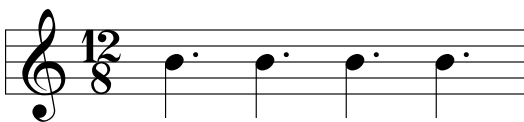
In 9/4, each beat is a dotted half-note.

Compound Quadruple Time

The top number of compound quadruple time signatures is 12. These time signatures have 4 beats per bar:



In 12/16, each beat is a dotted eighth



In 12/8, each beat is a dotted quarter



In 12/4, each beat is a dotted half.

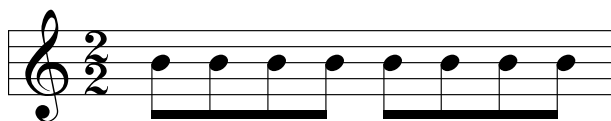
Beaming Notes Together

Notes that are an eighth-note long, or less, have beams. When we get two or more in a row, we often have to join their beams together. Notes are beamed together according to beats.

This bar of 4/4 time has 8 eighth-notes. They are beamed into 4 groups of 2 notes each, because there are 4 beats in the bar:



Compare the previous bar with the following bar of 2/2. This bar also has 8 eighth-notes in it, but they are beamed together into 2 groups, because there are only two beats in the bar:



In compound time, we often have groups of 3 notes beamed together. Consider this bar of 6/8 time. It has 6 eighth-notes, beamed into 2 groups, because there are 2 beats in the bar. Note that we cannot join the 3rd eighth-note to the 4th eighth-note:



Compare the beaming of the previous bar of 6/8 to the following bar of 3/4. It also has 6 eighth-notes in it, but they are beamed into 3 groups, because there are 3 beats in the bar.

