

What is a time signature?

The most straightforward definition is that it tells you how many beats in the bar (bar is "measure" in some countries).

But what does that mean?

Primitive music includes a lot of untuned percussion, and it's the beat or the pulse as we sometimes call it, that defines the character of the music. A slow beat is relaxing. A fast beat is exciting.

But the grouping of the beats also defines something about the music - let's make some categories of music - it's not an exhaustive list, but it will get us started.

- The March - Left-Right-Left-Right - the theme from Indiana Jones for example
- The Waltz - think of "The Blue Danube" for example
- The Jig - curiously, a fine example is the Carol "We Three Kings", though there is no biblical evidence that the camels actually danced... Or the nursery rhyme "Pop Goes the Weasel"
- Irregular - everything that doesn't seem to fit these categories

The bar lines show where each March, Waltz or Jig step recurs.

Why do we need a time signature?

Arguably the regular occurrence of bar lines is enough to show where the steps recur, but there is the matter of how notes are grouped inside each bar.

The format of the time signature

As with so many logical systems, there are some illogical warts on the smooth and clear surface, but let's deal with the basics...

- The top number is the number of beats in the bar - for beat read "step" in the examples above.
 - The bottom number says what those beats "are"...
- 2 = minim or half-note, 4 = crotchet or quarter-note, 8 = quaver or eighth-note

It's the bottom number that lets the confusion well up, and it's the bottom number where the first illogical things start to happen.

Some posh words

Let's take a leaf out of my "Degrees of the scale" article and try to define our categories of beat using different words...

First, let's make a distinction between "Simple" - the steady feel of a March or Waltz - and "Compound" - the skip or jig-step which gives the music an underlying "long-short-long-short" feel.

- A March is "Simple Duple" or "Simple Quadruple" (when you first learn music, the distinction is unclear and it's not wrong to lump them together for now)
- A Waltz is "Simple Triple"
- A Jig is "Compound Duple" or "Compound Quadruple"

So what is "Compound Triple"? It's rare, that's what it is! The Irish know it as a "slip-jig", but little famous music is in Compound Triple.

A simple beat is actually nothing more than a beat that breaks into two halves, four quarters or a mix thereof.

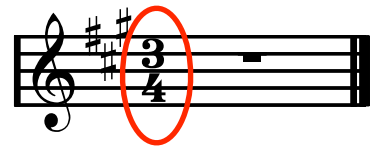
A compound beat, though, breaks into three equal units. Think of the word "evenly". A skip is a compound beat that is broken into a long piece (2 units) and a short piece (1 unit).

Some examples

2/2 is Simple Duple - take a march step every minim.

3/4 is Simple Triple - take a complete waltz step every bar.

4/4 is Simple Quadruple - any bar of 4/4 looks like a bar of 2/2 and *vice versa* (because 4 crotchets or their equivalent adds up to the same amount of music - a semibreve - as 2 minims or their equivalent), but 4/4 has four steps per bar and 2/2 has two steps.



A common misconception

A common misconception is that all time signatures with an 8 at the bottom are compound. But no, the definition of a compound time is that the top number is divisible by 3.

It just so happens that the common signatures with an 8 underneath - the ones you nearly always *see* - are 6/8, 9/8 & 12/8.

A table of common time signatures

Signature	Counting Minims	Counting Crotchets	Counting Quavers
Simple Duple	2/2	2/4	-
Simple Triple	3/2	3/4	3/8
Simple Quadruple	4/2	4/4	4/8
Compound Duple	-	6/4	6/8
Compound Triple	-	-	9/8
Compound Quadruple	-	-	12/8
Irregular	virtually all others	virtually all others	virtually all others

Signatures marked “-” are not illegal, they are simply rare.

A point of confusion

So is 3/8 a waltz step (3 beats in the bar), or a jig step (1 compound beat in the bar)?

- Given that any piece in 6/8 can be turned into 3/8 by adding extra bar-lines, it's clearly a jig
- Given that any piece in 3/4 can be turned into 3/8 by halving the note lengths, it's clearly a waltz

The distinction between jig and waltz is actually one of tempo...

Usually a bar in 3/4 is slower than a bar in 3/8, but it is not always the case.

So usually, 3/4 is the waltz and 3/8 the jig. But not always.

See also my Key Signatures Article and my Degrees of the Scale Article