

## Interval Basics

Qualities: major (M), minor (m), perfect (P), augmented (+ or a), diminished (° or d)

Sizes: unisons, seconds, thirds, fourths, fifths, sixths, sevenths, octaves

*\*intervals larger than an octave = **compound intervals***

*To calculate compound intervals, add 7 to the simple interval (e.g., a M3 enlarged by one octave becomes a M10)*

**N.B.:** only unisons, fourths, fifths, and octaves can be **perfect**

<u>Inversions:</u>	perfect $\leftrightarrow$ perfect	unisons $\leftrightarrow$ octaves
	major $\leftrightarrow$ minor	seconds $\leftrightarrow$ sevenths
	augmented $\leftrightarrow$ diminished	thirds $\leftrightarrow$ sixths
		fourths $\leftrightarrow$ fifths

Semitone (half-step) content:

m2 (1)	P5 (7)
M2 (2)	m6 (8)
°3 (2)	M6 (9)
+2 (3)	°7 (9)
m3 (3)	+6 (10)
M3 (4)	m7 (10)
P4 (5)	M7 (11)
+4/°5/tritone (6)	P8 (12)

*\*other intervals are possible but not relevant for our current purposes*

Reminders:

When identifying an interval, **always start with the number**. C up to G is always a fifth, regardless of any accidentals. F up to D is always a sixth. B up to A is always a seventh. From there, establish quality (make sure the number of half-steps/semitones corresponds to the chart above).

When told to write a certain interval above or below a given note, **as above, always start with the number**. For example, if told to write a perfect fifth above or below F#, ignore the accidental (at first) and work your way outward. F(1)–G(2)–A(3)–B(4)–C(5). So the fifth above F# is a C of some kind. That's where quality comes in. F#–C is only 6 semitones; we need one more to reach the P5's 7. We accomplish this by adding a sharp to the C. F#–C# is a perfect fifth. Done. The same process works for intervals below given pitches; simply work your way *down*. F(1)–E(2)–D(3)–C(4)–B(5). Reapply your

accidental, if applicable. F#–B is 7 semitones, so there's no need to add an additional accidental: you've got your P5.

Double-sharps & Double-flats: Use when needed. These are often required for augmented and diminished intervals, but they are possible in other contexts as well. For example, A#–Cx is a M3 (albeit a very obscure one!).

Musical Reference: The following ascending and descending chromatic scales could help you while you work out half-steps between notes and other such tasks.

Ascending



Descending

