INTERVALS

Music Intervals Introduction

**Definition:** An interval is the distance in pitch between two tones.

Each interval name is a combination of quantity and quality.

**QUANTITY:** The total number of letter names an interval contains. Quantity gives a general measurement. For example, A “third” or A “fifth”.

**QUALITY:** The total number of half-steps an interval contains. Quality gives an exact measurement. For ease of classification by quality, intervals are divided into two main groups: “PERFECT INTERVALS” & “MAJOR & MINOR INTERVALS”

There are two categories of intervals:

PERFECT INTERVALS - Which include: 1st (unisons), 4th, 5th, 8th (octaves)

MAJOR or MINOR INTERVALS - Which include 2nd, 3rd, 6th, 7th

**ASSIGNING QUALITY:** There are four rules for assigning Quality

#1). When a major interval is decreased by a half step it becomes MINOR.
#2). When a minor or perfect interval is decreased by a half step it becomes DIMINISHED.
#3). When a major or perfect interval is increased by a half step it becomes AUGMENTED.
#4). When a minor interval is increased by a half step it becomes MAJOR.

**Note:** These four rules must become memorized.

**SECTION TWO:** How to Name An Interval

Step One: Figure out the Quantity, (the number of degree steps)

Step Two: Figure out the Quality, (using the four rules given above)
EXAMPLE #1:

What is the interval from an: “E flat” to “B natural”?

\[ \text{\includegraphics[width=0.5\textwidth]{example.png}} \]

1). The first step is to determine quantity. This is the number of steps from letter name to letter name. For example; F# to D# is a 6th in quantity.

The quantity for this example is _________.

2). The second step is to determine the quality. This is the exact distance in half-steps. This step takes into consideration the sharps and/or flats involved.

In the example above, is the top note in the major scale of the lower note?

☐ Yes  ☐ No

If not, is it higher or lower than the scale tone of the same name? And, by how much?

Do you know the name of the interval above? Write the name of it below.

Your Answer_____________________________

SECTION THREE: Double Sharps and Flats

It is occasionally necessary to use a DOUBLE sharp or DOUBLE flat in order to maintain the proper quantity when building an interval. For example, in building a Dim. 7th on top of an “F” we would use an “E Double Flat” to maintain proper quantity. An “E Double Flat” would be correct since the note “E” is seven steps up from “F.” In another example, a double sharp could be used to create an Aug. 5th, from “F#” to “C Double Sharp”.

These double sharp and flat symbols are written as shown in the diagrams below:

\[ \text{\includegraphics[width=0.5\textwidth]{diagrams.png}} \]
WRITTEN ASSIGNMENTS:

Study (A).

Identify the following intervals. Use these abbreviations - MA for Major, MI for Minor, P for Perfect, A for Augmented & D for Diminished. The first two have been done.

1. G to Bb = MI 3
2. A to C# = MA 3
3. F to E = _____
4. C to A = _____
5. Bb to Ab = _____
6. D to A# = _____

Study (B).

Intervals are stated. Name each interval indicated.

1. F to _____ = D 5
2. Eb to _____ = MA 3
3. G# to _____ = P 4
4. B to _____ = A 6
5. A to _____ = MI 7
6. F# to _____ = P 8

Answers:

Study (A)


Answers:

Study (B)

The Major Key-Signatures

There are 12 musical keys which can be used to create music. Major keys are the foundational keys and minor keys are a form of major created by playing the major scale off of its sixth scale degree. Making a study of major keys - and memorizing all of them - is one of the first steps in strengthening your ability as a musician. The next step with the keys is to clearly understand the, “relative minor,” ones found within the major structure. Below you will find the structure of the major keys ascending from the neutral key of, “C,” to the full sharp or flat coverage of keys like, “C#,” and, “Cb.” Please read below...

### SHARPS

The key of “C major” has no sharps or flats

The sharp keys move up in 5ths from the neutral key of “C.”

Each new key contains another sharp in its content of accidental notes.

<table>
<thead>
<tr>
<th>Key</th>
<th>Sharps</th>
</tr>
</thead>
<tbody>
<tr>
<td>C#</td>
<td>1</td>
</tr>
<tr>
<td>G#</td>
<td>2</td>
</tr>
<tr>
<td>D#</td>
<td>3</td>
</tr>
<tr>
<td>A#</td>
<td>4</td>
</tr>
<tr>
<td>E#</td>
<td>5</td>
</tr>
<tr>
<td>B#</td>
<td>6</td>
</tr>
<tr>
<td>F##</td>
<td>7</td>
</tr>
<tr>
<td>C##</td>
<td>All</td>
</tr>
</tbody>
</table>

### FLATS

The flat keys move up in 4ths from the neutral key of “C.”

Each new key contains another flat in its content of accidental notes.

<table>
<thead>
<tr>
<th>Key</th>
<th>Flats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fb</td>
<td>1</td>
</tr>
<tr>
<td>Eb</td>
<td>2</td>
</tr>
<tr>
<td>Db</td>
<td>3</td>
</tr>
<tr>
<td>Ab</td>
<td>4</td>
</tr>
<tr>
<td>Gb</td>
<td>5</td>
</tr>
<tr>
<td>Cb</td>
<td>6</td>
</tr>
<tr>
<td>F##</td>
<td>All</td>
</tr>
</tbody>
</table>

### Major Sharp Key-Signatures:

- Key of “G” = 1 sharp
- Key of “D” = 2 sharps
- Key of “A” = 3 sharps
- Key of “E” = 4 sharps
- Key of “B” = 5 sharps
- Key of “F#” = 6 sharps
- Key of “C#” = All notes sharp (7 sharps)

### Major Flat Key-Signatures:

- Key of “F” = 1 flat
- Key of “Bb” = 2 flats
- Key of “Eb” = 3 flats
- Key of “Ab” = 4 flats
- Key of “Db” = 5 flats
- Key of “Gb” = 6 flats
- Key of “Cb” = All notes flat (7 flats)

### The order of sharps and flats

- Key of “G” = F#
- Key of “D” = F#, C#
- Key of “A” = F#, C#, G#
- Key of “E” = F#, C#, G#, D#
- Key of “B” = F#, C#, G#, D#, A#
- Key of “F#” = F#, C#, G#, D#, A#, E#
- Key of “C#” = F#, C#, G#, D#, A#, E#, B#

Memorize the order of sharps:

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____________________________________________
____________________________________________
____________________________________________
____________________________________________
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Memorize the order of flats:

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____________________________________________
____________________________________________
____________________________________________
____________________________________________
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