College of Musical Arts
BOWLING GREEN STATE UNIVERSITY

THEORY WORKSHEETS

by

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Introduction

The following worksheets are designed to assist you as you prepare for undergraduate study in music. Basic elements of musicianship (written theory and aural skills) are an important part of your musical training. You can get a head start on your academic musical studies if you work through these worksheets with your orchestra director, private music teacher, or music specialist in your school. This basic musical information and skill development is not exclusive to Bowling Green State University. Music schools in universities across the country require their music students to know this information and have the skills to notate and identify intervals, triads, and seventh chords as well as be able to sing melodies and perform rhythmic patterns.

It is our hope that the following worksheets will assist you as you strive to become an independent musician.
1. How many cumulative quarter note values in the following notes and rests:
   a.  
   b.  
   c.  
   d.  

2. How many cumulative eighth note values in the following notes and rests:
   a.  
   b.  
   c.  
   d.  

3. Complete the following. Use a note value (for item "d" provide rests) in each blank--one for the note and another for the note(s) which equals the dot.
   a.  
   b.  
   c.  
   d.  

4. Classify each meter as duple, triple or quadruple. Notate the beat (unit).

Example:

\[
\begin{array}{ccccccc}
2 & \cdot & 3 & 3 & 2 & 4 & 8 \\
\hline
2 & 4 & 8 & 4 & 8 & \text{c} & 4 & 16 & 8 \\
\end{array}
\]

duple

\[
\begin{array}{ccccccc}
3 & 4 & 4 & 3 & 2 & 2 & 3 & 4 \\
\hline
2 & 4 & 32 & 16 & 16 & 8 & 16 & 32 \\
\end{array}
\]

5. Correct the following rhythmic examples by rebeaming and combining as necessary. Use the given meters. Provide bar lines. The first example is started for you.

\[
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\hline
\end{array}
\]

(Continue with your answer.)

\[
\begin{array}{cccccccc}
3 & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\hline
\end{array}
\]

(Hint: Combine tied notes to form a single note value.)

\[
\begin{array}{cccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\hline
\end{array}
\]
1. Classify each meter as simple or compound, and then duple, triple or quadruple. Notate the beat (unit).

Example:

\[
\frac{6}{4} = \text{Compound, Duple} \quad \text{Beat} = \ \boxed{\ \cdot} \quad \frac{12}{16} = \ \boxed{\ \cdot} \quad \text{Beat} = \\
\frac{3}{8} = \ \boxed{\ \cdot} \quad \text{Beat} = \quad \frac{6}{8} = \ \boxed{\ \cdot} \quad \text{Beat} = \\
\frac{4}{4} = \ \boxed{\ \cdot} \quad \text{Beat} = \quad \frac{2}{2} = \ \boxed{\ \cdot} \quad \text{Beat} = \\
\frac{9}{8} = \ \boxed{\ \cdot} \quad \text{Beat} = \quad \frac{12}{4} = \ \boxed{\ \cdot} \quad \text{Beat} =
\]

2. Correct the following rhythmic examples by rebeaming and combining as necessary. Use the given meters. Provide bar lines. First note value is given for you.

(Hint: Combine tied notes to form a single note value)
1. Notate key signatures:

\[ \text{Ab M} \quad \text{BM} \quad \text{dm} \quad \text{em} \quad \text{GbM} \quad \text{BbM} \quad \text{fm} \]

2a. Name the major key and identify the given scale degree by number and name:

Example: \( G \quad \text{4th} \quad \text{Subdominant} \)

2b. Name the minor key and identify the given scale degree by number:

3. Given the major (first row) or minor (second row) key and scale degree, notate the pitch.

\[ \text{E: 3} \quad \text{F: 7} \quad \text{A: 2} \quad \text{F\# 4} \quad \text{Eb: 6} \quad \text{Ab: 3} \quad \text{Bb: 5} \]

\[ \text{d: 3} \quad \text{f\#: 2} \quad \text{bb: 4} \quad \text{g: 7} \quad \text{e: 5} \quad \text{g\#: 6} \quad \text{c\#: 2} \]

4. Notate the following scales. Do NOT use key signatures.

\[ \text{A Major (ascending only)} \quad \text{E-flat Major (ascending only)} \]

\[ \text{E Major (descending only)} \quad \text{f harmonic minor (ascending only)} \]

\[ \text{f-sharp melodic minor (ascending and descending)} \]

\[ \text{b-flat melodic minor (ascending and descending)} \]
Notate the following scales. Do NOT use key signatures.

B♭ Major (ascending only)

G Major (descending only)

B Major (ascending only)

Relative MAJOR of f minor (ascending only)

Relative MAJOR of d minor (descending only)

b natural minor (ascending only)

Relative natural MINOR of B major (ascending only)

c♯ harmonic minor (ascending only)

c melodic minor (ascending and descending)

Parallel harmonic minor of C Major (ascending only)
1. Identify these intervals (quality and number). Be sure to clearly indicate Major versus minor (i.e., M, m).

Example:

\[ \text{m}6 \]

2. Construct intervals ABOVE and BELOW each given note. Do NOT alter the given note.

Example:

\[ \text{dim. 7} \quad \text{m}2 \quad \text{Aug. 4} \quad \text{M}7 \quad \text{M}6 \quad \text{Aug. 2} \quad \text{m}3 \quad \text{M}3 \]

3. Invert the following intervals; identify all intervals:

Example:

\[ \text{M3} \quad \text{m}6 \]
Triad (Root position) Worksheet

1. Identify these triads by type (M, m, +, o). Be sure to clearly indicate Major versus minor.

2. Notate the triad, given the root and the type.

Example:

3. Given the chord quality and one member of the triad, notate the remainder of the triad.
   Do NOT alter the given note.

Example:
1. Identify the quality of the given triad and notate the first inversion (\( \frac{6}{3} \)) and second inversion (\( \frac{6}{4} \)) of each:

Example:

2. Identify root, inversion (root, \( \frac{6}{1} = 1st, \frac{6}{4} = 2nd \)), and quality (M, m, +, o) of each example:

Example:

3. Notate the following triads given root, quality, inversion:

Example:
1. Identify the following chords. Supply roman numeral and inversion symbol (figured bass). Be sure to provide proper case.

Example:

\[ \text{B}^b: \text{iii}^6 \quad \text{D: } \quad \text{c: } \text{g: } \quad \text{D: } \quad \text{b: } \]

\[ \text{A: } \quad \text{A}^b: \quad \text{a: } \quad \text{f: } \quad \text{d: } \quad \text{E: } \]

2. Notate the triad indicated and supply key signature. Major keys are upper case, minor are lower.

Example:

\[ \text{A: } \text{IV}^6 \quad \text{d: } \text{ii}^0 \quad \text{D: } \text{V} \quad \text{c}^\#: \text{vii}^0 \quad \text{e: } \text{V} \quad \text{E: } \text{iii} \]

\[ \text{B: } \text{ii}^4 \quad \text{g: } \text{iv}^3 \quad \text{c: } \text{VI} \quad \text{f}^\#: \text{III} \quad \text{A}^b: \text{vii}^0^6 \quad \text{D: } \text{vi}^4 \]
1. How many cumulative quarter note values in the following notes and rests:

a. \[ \begin{array}{c} \boxed{5} \\ \end{array} \]

b. \[ \begin{array}{c} \boxed{8} \\ \end{array} \]

c. \[ \begin{array}{c} \boxed{8} \\ \end{array} \]

d. \[ \begin{array}{c} \boxed{11} \\ \end{array} \]

2. How many cumulative eighth note values in the following notes and rests:

a. \[ \begin{array}{c} \boxed{12} \\ \end{array} \]

b. \[ \begin{array}{c} \boxed{9} \\ \end{array} \]

c. \[ \begin{array}{c} \boxed{8} \\ \end{array} \]

d. \[ \begin{array}{c} \boxed{8} \\ \end{array} \]

3. Complete the following. Use a note value (for item "d" provide rests) in each blank—one for the note and another for the note(s) which equals the dot.

a. \[ \begin{array}{c} \boxed{\text{dot}} + \boxed{\text{half}} \\ \end{array} \]

b. \[ \begin{array}{c} \boxed{\text{quarter}} + \boxed{\text{quarter}} + \boxed{\text{half}} \\ \end{array} \]

c. \[ \begin{array}{c} \boxed{\text{quad}} + \boxed{\text{quad}} + \boxed{\text{quarter}} + \boxed{\text{half}} \\ \end{array} \]

d. \[ \begin{array}{c} \text{dot} + \text{dot} + \boxed{\text{rest}} + \boxed{\text{rest}} + \boxed{\text{rest}} \\ \end{array} \]
4. Classify each meter as duple, triple or quadruple. Notate the beat (unit).

Example:

\[ \begin{array}{cccccccc}
\text{duple} & \text{triple} & \text{triple} & \text{duple} & \text{quadruple} & \text{quadruple} & \text{quadruple} & \text{duple} \\
\end{array} \]

\[ \begin{array}{cccccccc}
\text{triple} & \text{quadruple} & \text{quadruple} & \text{triple} & \text{duple} & \text{duple} & \text{triple} & \text{quadruple} \\
\end{array} \]

5. Correct the following rhythmic examples by rebeaming and combining as necessary. Use the given meters. Provide bar lines. The first example is started for you.

\( \begin{array}{cccccccc}
\end{array} \)

(Continue with your answer.)

\( \begin{array}{cccccccc}
\end{array} \)

(Hint: Combine tied notes to form a single note value.)

\( \begin{array}{cccccccc}
\end{array} \)
1. Classify each meter as simple or compound, and then duple, triple or quadruple. Notate the beat (unit).

Example:

\[
\begin{align*}
\frac{6}{4} & = \underline{\text{Compound}} \underline{\text{Duple}} \quad \text{Beat} = \ \d\ . \\
\frac{3}{8} & = \underline{\text{Simple}} \underline{\text{Triple}} \quad \text{Beat} = \ \d \ . \\
\frac{4}{4} & = \underline{\text{Simple}} \underline{\text{Quadruple}} \quad \text{Beat} = \ \d \ . \\
\frac{9}{8} & = \underline{\text{Compound}} \underline{\text{Triple}} \quad \text{Beat} = \ \d \ . \\
\frac{12}{16} & = \underline{\text{Compound}} \underline{\text{Quadruple}} \quad \text{Beat} = \ \d \ .
\end{align*}
\]

2. Correct the following rhythmic examples by rebeaming and combining as necessary. Use the given meters. Provide bar lines. First note value is given for you.

\[
\begin{align*}
\frac{3}{4} & \quad \frac{6}{8} \\
\frac{3}{4} & \quad \frac{6}{8}
\end{align*}
\]

(Hint: Combine tied notes to form a single note value)
1. Notate key signatures:

\[
\begin{array}{cccccc}
& \text{Gb} & \text{C} & \text{D} & \text{Gb} & \text{Db} \\
\text{Ab} & \text{M} & \text{Bm} & \text{dm} & \text{em} & \text{Gbm} & \text{Bbm} & \text{Fm}
\end{array}
\]

2a. Name the major key and identify the given scale degree by number and name:

Example: \( \text{G}_4 \text{b} \text{Subdominant} \)

\( \text{Ab}_3 \text{mediant} \)

\( \text{C}_3 \text{mediant} \)

\( \text{D}_4 \text{subdominant} \)

\( \text{Gb}_6 \text{submediant} \)

\( \text{Db}_2 \text{supertonic} \)

2b. Name the minor key and identify the given scale degree by number:

\( \text{d}_5 \text{tonic} \)

\( \text{ab}_7 \text{leading tone} \)

\( \text{g}_5 \text{dominant} \)

\( \text{e}_2 \text{supertonic} \)

\( \text{c}_4 \text{subdominant} \)

\( \text{f}_6 \text{submediant} \)

3. Given the major (first row) or minor (second row) key and scale degree, notate the pitch.

\( \text{E: 3} \)

\( \text{F: 7} \)

\( \text{A: 2} \)

\( \text{F# 4} \)

\( \text{E: b: 6} \)

\( \text{A: b: 3} \)

\( \text{B: b: 5} \)

\( \text{D: 3} \)

\( \text{F#: 2} \)

\( \text{B: b: 4} \)

\( \text{G: 7} \)

\( \text{E: 5} \)

\( \text{G#: 6} \)

\( \text{C#: 2} \)

4. Notate the following scales. Do NOT use key signatures.

- A Major (ascending only)
- F-Flat Major (ascending only)
- E Major (descending only)
- F Harmonic Minor (ascending only)
- F-Sharp Melodic Minor (ascending and descending)
- B-Flat Melodic Minor (ascending and descending)
Notate the following scales. Do NOT use key signatures.

**B ♭ Major (ascending only)**

**G Major (descending only)**

**B Major (ascending only)**

**Relative MAJOR of f minor (ascending only)**

**Relative MAJOR of d minor (descending only)**

**b natural minor (ascending only)**

**Relative natural MINOR of B major (ascending only)**

**c ♭ harmonic minor (ascending only)**

**e melodic minor (ascending and descending)**

**Parallel harmonic minor of C Major (ascending only)**
1. Identify these intervals (quality and number). Be sure to clearly indicate Major versus minor (i.e., M, m).

Example:

\[
\begin{array}{cccccccc}
\text{m6} & \text{m7} & \text{+2} & \text{P5} & \text{M7} & \text{M3} & \text{06} & \text{dim. 5} \\
\end{array}
\]

\[
\begin{array}{cccccccc}
\text{P4} & \text{m7} & \text{M3} & \text{Aug. 5} & \text{M6} & \text{+7} & \text{m3} & \text{010 (or 03)} \\
\end{array}
\]

2. Construct intervals ABOVE and BELOW each given note. Do NOT alter the given note.

Example:

\[
\begin{array}{cccccccc}
\text{m3} & \text{M6} & \text{M3} & \text{M2} & \text{P5} & \text{P4} & \text{m6} & \text{m3} \\
\end{array}
\]

\[
\begin{array}{cccccccc}
\text{dim. 7} & \text{m2} & \text{Aug. 4} & \text{M7} & \text{M6} & \text{Aug. 2} & \text{m3} & \text{M3} \\
\end{array}
\]

3. Invert the following intervals; identify all intervals:

Example:

\[
\begin{array}{cccccccc}
\text{M3} & \text{m6} & \text{m7} & \text{M2} & \text{dim. 4} & \text{M3} & \text{P5} & \text{+2} \\
\end{array}
\]

\[
\begin{array}{cccccccc}
\text{m6} & \text{M3} & \text{M2} & \text{m7} & \text{Aug. 5} & \text{m6} & \text{P4} & \text{07} \\
\end{array}
\]
1. Identify these triads by type (M, m, +, o). Be sure to clearly indicate Major versus minor.

\[
\begin{align*}
\text{m} & + \quad \text{M} & + \\
\text{o} & + \quad \text{m} & + \quad \text{M}
\end{align*}
\]

2. Notate the triad, given the root and the type.

Example:

\[
\begin{align*}
\text{o} & \quad \text{m} & + \\
\text{m} & + \quad \text{m} & + \quad \text{M}
\end{align*}
\]

3. Given the chord quality and one member of the triad, notate the remainder of the triad.
Do NOT alter the given note.

Example:

\[
\begin{align*}
\text{3rd} & \quad \text{5th} & \quad \text{5th} & \quad \text{Root} & \quad \text{5th} & \quad \text{3rd} & \quad \text{3rd} & \quad \text{5th}
\end{align*}
\]

\[
\begin{align*}
\text{m} & \quad \text{M} & \quad \text{o} & \quad \text{m} & + \quad + & \quad \text{M} & \quad \text{m}
\end{align*}
\]

\[
\begin{align*}
\text{5th} & \quad \text{Root} & \quad \text{3rd} & \quad \text{Root} & \quad \text{3rd} & \quad \text{5th} & \quad \text{Root} & \quad \text{5th}
\end{align*}
\]

\[
\begin{align*}
\text{m} & + \quad \text{o} & \quad \text{m} & \quad \text{M} & \quad \text{m} & \quad \text{m} & +
\end{align*}
\]
1. Identify the quality of the given triad and notate the first inversion (\( \text{5} \)) and second inversion (\( \text{6} \)) of each:

   Example:

   \[
   \text{Minor} \quad \text{Major} \quad \text{dim (o)} \\
   \text{dim (o)} \quad \text{aug (+)} \quad \text{minor}
   \]

2. Identify root, inversion (root, \( \text{6} = 1\text{st}, \text{4} = 2\text{nd} \)), and quality (M, m, +, o) of each example:

   Example:

   \[
   \text{C} \quad \text{6 (1st)} \quad \text{g} \quad \text{6} \quad \text{A} \quad \text{6} \quad \text{d} \quad \text{6} \quad \text{D} \quad \text{6} \quad \text{b} \quad \text{6} \\
   \text{Major} \quad \text{minor} \quad \text{Major} \quad \text{dim (o)} \quad \text{Major} \quad \text{dim (o)}
   \]

   \[
   \text{G} \quad \text{6} \quad \text{G} \quad \text{6} \quad \text{a} \quad \text{6} \quad \text{E} \quad \text{6} \quad \text{e} \quad \text{6} \quad \text{B} \quad \text{6} \\
   \text{Major} \quad \text{Major} \quad \text{dim (o)} \quad \text{Major} \quad \text{dim (o)} \quad \text{Major}
   \]

3. Notate the following triads given root, quality, inversion:

   Example:

   \[
   \text{C} \quad \text{M} \quad \text{b} \quad \text{m (root)} \quad \text{d} \quad \text{6} \quad \text{E} \quad \text{+} \quad \text{A} \quad \text{M} \quad \text{G} \quad \text{M (root)} \\
   \text{f} \quad \text{m} \quad \text{A} \quad \text{+} \quad \text{f} \quad \text{6} \quad \text{E} \quad \text{M} \quad \text{G} \quad \text{m} \quad \text{a} \quad \text{m (root)}
   \]
1. Identify the following chords. Supply roman numeral and inversion symbol (figured bass). Be sure to provide proper case.

Example:

\[
\begin{align*}
B^b: \text{iii}\,^6 & \quad D: \text{IV} & \quad c: \text{iv} & \quad g: \text{VI}\,^6 & \quad D: \text{ii}\,^4 & \quad b: \text{V} \\
A: \text{V}\,^6 & \quad A^b: \text{vi} & \quad a: \text{ii}\,^4 & \quad f: \text{III}\,^6 & \quad d: \text{vii}\,^6 & \quad E: \text{iii}
\end{align*}
\]

2. Notate the triad indicated and supply key signature. Major keys are upper case, minor are lower.

Example:

\[
\begin{align*}
A: \text{IV}\,^6 & \quad d: \text{ii}\,^0 & \quad D: \text{V} & \quad c^\#: \text{vii}\,^6 & \quad e: \text{V} & \quad E^b: \text{iii} \\
B: \text{ii}\,^4 & \quad g: \text{iv}\,^3 & \quad c: \text{VI} & \quad f^\#: \text{III} & \quad A^b: \text{vii}\,^6 & \quad D: \text{vi}\,^4
\end{align*}
\]
Rhythm Worksheet - Simple Meter

1. 2. 3. 4. 5. 6.

7. 8. 9. 10. 11. 12.


25. 26. 27.

28. 29. 30.

31. 32. 33.

34. 35. 36.

37. 38. 39.