Volpiano Protocols with Self-Test

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About Volpiano

Volpiano is a font which was developed for the transcription of chant melodies by Fabian Weber at the University of Regensburg under the direction of David Hiley. Using alphabetic characters and other symbols, the Volpiano font "encodes" a chant melody as a searchable text string.

About Volpiano Entry

In the Cantus database, the Volpiano font appears as stemless noteheads on a staff. Contributors to the database are asked to use Volpiano protocols that govern use of clefs and barlines, spacing between words, syllables, and neumes, as well as the rendering of specific neumes (see also Volpiano Entry: Neume Protocols). These protocols ensure consistency between contributors and manuscripts. They also facilitate alignment between music and text in the Cantus Preview at the bottom of each chant record.

About Cantus

The Cantus Database is a searchable digital archive of Latin chant with nearly 400,000 chant records from more than 130 manuscript and early print sources, contributed by scholars world-wide. An increasing number of records include links to manuscript images and to transcribed melodies which are searchable using Cantus Melody Search. To learn more: cantus.uwaterloo.ca under "About".

Becoming a Volpiano contributor

Becoming a contributor requires a username and a password from a Cantus administrator. See http://cantus.uwaterloo.ca/tutorial

After logging in with a username and password (figure 1), the contributor will see "My sources" (figure 2). Clicking "Fulltext & Volpiano editor" takes the contributor to the manuscript workspace. After choosing a folio (figure 3) from a pull-down menu, the contributor can "edit" a chant. Clicking EDIT opens the workspace for the selected chant.

Figure 1. Login   **Figure 2.** My sources   **Figure 3.** Choose a folio and edit

Before starting: The Descriptive Fields

Offices

Matins
Lauds
Prime
Terce
Sext
None
Vespers
V2 Second
        Vespers
Compline

Common Genres

Responsory (long)
responsory (short)
Verse
Antiphon
Hymn
Invitatory
W versicle

Mode
Identifies the mode of the chant, including if **T**ransposed

Cantus ID
Links to the standardized full text for each chant melody

Volpiano Protocols: Basic Entry

Use the following protocols for entering melodies as Volpiano into the Cantus Volpiano field.

1. Clef

1--- • Use the number 1 followed by three hyphens for non-transposing treble clef

Example 1. Treble Clef

2. Barlines

---3 • Use three hyphens and the number 3 for a single barline
---4 • Use three hyphens and the number 4 for a thin double barline
(see Table 1 for precise barline protocols)

Example 2. Barlines: ---3 and ---4

3. Pitches

• Type lower-case ASCII letters to represent pitches of a melody
• For liquescent neumes, use upper case

Example 3a. Volpiano pitches as ASCII letters

1   9   a   b   c   d   e   f   g   h   j   k   l   m   n   o   p   q   r   s   yY   iI   zZ

Example 3b. Upper-case letters for liquescent neumes

)   A   B   C   D   E   F   G H   J   K   L   M   N   O   P   Q   R   S

Volpiano Protocols: Basic Entry

4. Transcribing Neumes: See **Volpiano Neume Protocols** for manuscript-specific guidelines
• Chant manuscripts use neumes to render pitches and musical gestures and use various clef signs to identify pitch placement on a staff
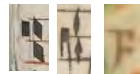
Example 4a. Sample neumes from Köln 1161 (11v, 32r-v) and Dendermonde (153r)

One-note	Two-note	Three-note		Liquescent	Quilisma
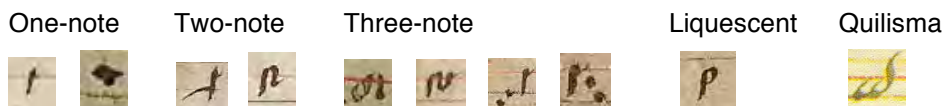
Example 4b. Sample C clef signs   Example 4c. Sample F clef signs

(a) Transcribe as ***connected*** in Volpiano

• Neumes written as a single/connected pen-stroke

• Neumes with subbipuncti including a subbipunctum flexus

• Reiterated pitches over a single syllable

• Reiterated pitch *before* any other neume (pressus of assimilation)

• Reiterated pitch *after* any other neume (oriscus)
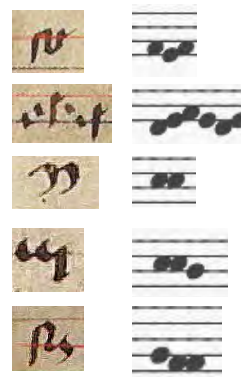
(b) Transcribe as ***disconnected*** in Volpiano

• Neumes in close succession over a single syllable,
but with visible space between

• Two neumes with reiterated pitch in between,
which sometimes appear connected (pressus of assimilation)

• Single pitch before a quilisma
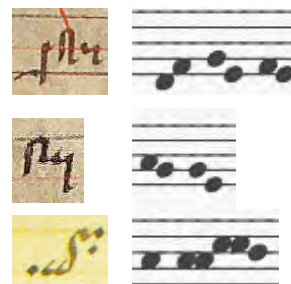
**5. Hyphens: Words, Syllables, Neumes**
Use hyphens to delineate the relationship of neumes to text
• 3 hyphens   [---]   *between*   Words (also before/after barlines and after a clef sign)
• 2 hyphens   [--]   *between*   Syllables
• 1 hyphen   [-]   *between*   Individual neumes sung to the same syllable

Example 5. Volpiano: 1---dh-k--h--h---h--h--- (yellow highlighting shows spacing between words)
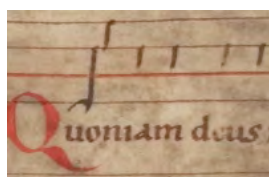
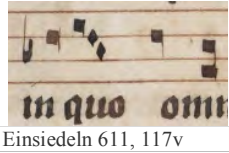Quo - -- ni -- am --- de -- us

Utrecht 406, 5r
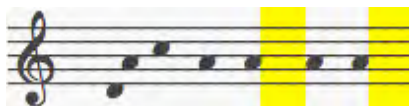
Volpiano Protocols: Basic Entry
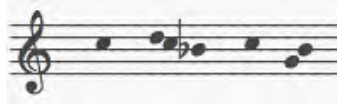
6. Flats and Naturals
Transcribe flats and naturals:
• Next to the closest B (not in front of the larger neume group)
• Only once, not before each subsequent B
• Even if in a different hand

Example 6. B Flat   (a) Correct   (b) Incorrect

Einsiedeln 611, 117v

7. Line Breaks, Page Breaks, (7, 77)
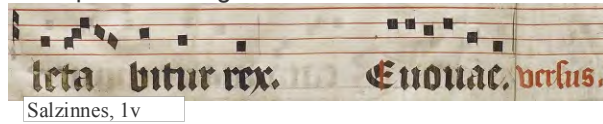The number 7 (small vertical stroke) indicates a line break; 77 indicates a page break.
• Use *immediately* after the last neume before the break (displays as small vertical stroke)

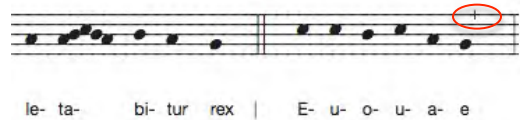Example 7a. Using 7 and 77

Line break = 7   Page break = 77

• If a chant concludes a line or concludes a page, use 7 and 77, even if followed by further text.

Example 7b. Using 7 when a chant ends the line

Salzinnes, 1v

le- ta-   bi- tur rex | E- u- o- u- a- e

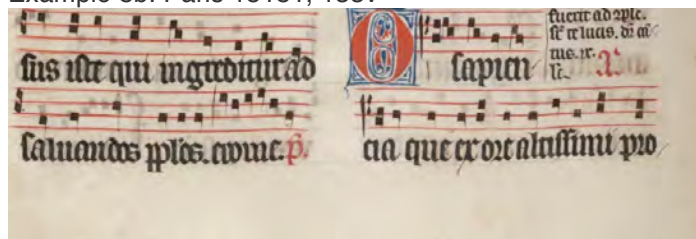### 8. Column Breaks (777)
Some manuscript pages are arranged in columns
• Use 777 when music from the left-hand column continues into the right-hand column
• Use 77 for the page break (end of right-hand column), not 777

Example 8a. Column break= 777

Example 8b. Paris 15181, 133v

Column 1

Column 2

sal- van-dos po- pu- los | e- u- o- u- a- e | ti- a que ex o- re al- tis- si- mi pro-

Volpiano Protocols: Basic Entry

9. Custos
Scribes may include a custos at the end of a line *or* a clef change to clarify the next note.
• Do not transcribe the custos
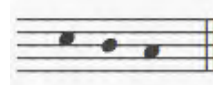
Example 9. Custos preceding a clef change

10. Barlines
• A **Thin double barline** indicates the **end** of a chant, and is used after the following:
    – Antiphon (before differentia or psalm incipit)   Example 10a. End barline
    – Invitatory (before Venite incipit)
    – Responsory (Respond portion)
    – Hymn (final verse)
    – Versicle with Response

• A **Single barline** indicates a **section** or a fragment of a chant and is used after the following:
    – Chant incipits (identified in the standardized text field with *)
    – Differentia
    – Psalm incipit   Example 10b. Section barline
    – Venite incipit
    – Repetendum
    – Responsory Verse
    – Repetendum cue
    – Hymn verses
    – Versicle (if no Response)

• In general, ignore the given barlines in a manuscript

Table 1. Barlines

A	Antiphon	II			
	Antiphon with psalm incipit or differentia	II	I		
	Antiphon incipit followed by psalm incipit	I	I	I	
R	Respond with Repetendum		I	II	
	Respond with two Repetenda	I	I	II	
V	Verse with Repetendum cue	I	I		
	Verse with multiple Repetendum cues	I	I	I	
	Verse with Repetendum cue and Respond incipit	I	I	I	
H	Hymn with single verse	I			
	Hymn with multiple verses	I	I	I	II
Sq	Sequence with single verse	I			
	Sequence with multiple verses	I	I	I	II
I	Invitatory alone	II			
	Invitatory with Venite incipit	II	I		
W	Versicle	I			
	Versicle with response	I	II		
*	Incipit of any genre (psalm, venite, differentia)	I			

Volpiano Protocols: Basic Entry

11. Unknown Neumes for Review

Every manuscript includes neumes not accounted for in the Volpiano Neume Protocols. When you find a questionable neume, indicate the neume in the **Neumes for Review** chart for your manuscript. The chart is available as a Word document on www.cantus.uwaterloo.ca

Example 11**.** Neumes for Review Chart

Neumes for Review

Important: This chart will introduce the editor of your manuscript to the particularities of the notation and to the transcription choices that you have made.

About this Chart
Use this chart to record:
• Any neumes or signs not found in the current Volpiano Neume Protocols
• Your transcription of the neume or sign in question

Review process
• Submit this chart regularly to your supervisor for review
• Submit this chart to your supervisor once you have completed the manuscript

TEMPLATE

#		Affected syl-la-BLE	Folio	Date recorded	Reviewed by
	Chant name (Genre)	Transcription	Neume image		

SAMPLE

1.		vir-GA	153r	June 20/16	
	O aspiciencs (R)				

***

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

Volpiano Protocols: Beyond the Basics

Note: Some of the following protocols require basic knowledge of the liturgy. Refer to the Quick Guide to Manuscripts (Antiphonals) and Liturgy as needed.

12. Range, Mode, and Finals
• Chants should be transcribed in the range appropriate to the mode for each chant. For example, chants in mode 2 should range from A below middle C to the octave above.
• Final pitches for each chant should be close to middle C, as shown by the circled finals, below.

Example 12. Modal ranges with circled "finals" (ending pitch for chants in each mode)

13. Transposed Mode Transcription Suggestions
A "T" after the modal number indicates a transposed mode.
• Mode 1T and 2T. Final = A (a sixth above middle C to avoid extensive ledger lines)
• Mode 3T and 4T. Final = B (a seventh above middle C to avoid extensive ledger lines)
• Mode 5T and 6T. Final = C (middle C to avoid extensive ledger lines)
• Mode 7T and 8T. Final = D (a second above middle C to avoid extensive ledger lines)
> Note: Other signs may appear in the mode field, including an * when only an incipit is provided, "r" for recitational, "s" for special, and "?" for unknown.

14. Transcribing Incipits, Differentiae, Repetendum cues
Short incipits and cues have special hyphenation rules
• Use 2 hyphens between neumes for:
  – Text incipits with formula-based melodies, including
  – Differentia
  – Psalm, Canticle, and Venite incipits

Example 14a. Differentia and Psalm incipit: Two hyphens between neumes

e- u- o- u- a- e | ~Deus iudicium

• Use text-appropriate spacing for Repetendum cues with distinct melodies
  – Often the repetendum cue is abbreviated; to find the full text, look back to the Respond

Example 14b. Repetendum cue: Text-appropriate spacing

Et --- no -- men

Volpiano Protocols: Beyond the Basics

15. Range of Responsory and Verse
The Responsory and Verse have separate entries in Cantus, but are a *single chant* and *mode*.
• Transcribe the Verse in the same relative range as the Respond, appropriate to the mode
– For ex.: the Repetendum cue should be transcribed in the same octave as the Repetendu

Example 15. End of Respond, followed by Verse

Paris 15181, 110v

The Verse has been transcribed an octave too high. Pitches of Repetendum should match pitches of the Repetendum cue.

16. Missing Text but Readable Pitches
Full text (MS spelling) field:
• Use # to represent the missing text in the MS text field
• Always use one # (even if multiple words/syllables are missing)

Example 16a. Missing Complete Words. Paris 12044, 230v, *Desiderium*

Full text (MS spelling)

Desiderium animae eius tribuisti ei domine | et voluntate # fraudasti eum domine

Example 16b. Missing Syllables (ser***vulos***"). Paris 12044 237v, *Sancte Maure confessor*
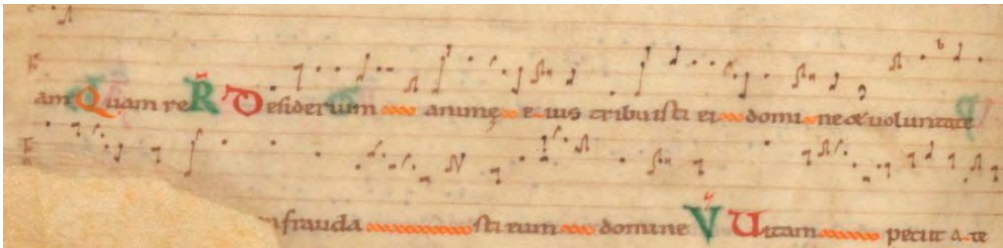
Full text (MS spelling)

Sancte Maure xpisti confessor audi rogantes ser # et impetratam caelitus tu defeR indulgentiam

Volpiano
• For the section with missing text use two hyphens (--) between neumes
• Begin and end the section with missing text using three hyphens (---)

Example 16b. Volpiano field, Paris 12044, 230v, *Desiderium*

3 hyphens

2 hyphens

17. Missing Pitches
(a) **Over a complete word**
Full text (MS spelling)
• Enclose affected text in curly brackets { }

Example 17a. Missing pitches over a complete word Paris 15181, 24v

Full text (MS spelling)

corde {meo} exaudi me

Volpiano
• Use 6------6 to represent missing pitches (6 hyphens in between)
with three hyphens before and after each 6

Example 17b. Missing Pitches. Paris 15181, 24v

cor- de   {meo   }   e-   xau-di

Volpiano Protocols: Beyond the Basics

(b) **Missing pitches over select syllables**
Full text (MS spelling)
• Enclose affected syllable(s) in curly brackets { } as shown below.
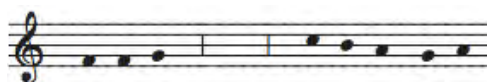
Example 17c. Missing pitches over select syllables

Full text (MS spelling)

Allelu {ia} domine deus

Volpiano
• Use 6------6 to represent missing pitches, as described above.

Example 17d. Missing Pitches over select syllables

Al- le- lu   {ia   do- mi- ne   de- us

18. Missing Pitches+Missing Text
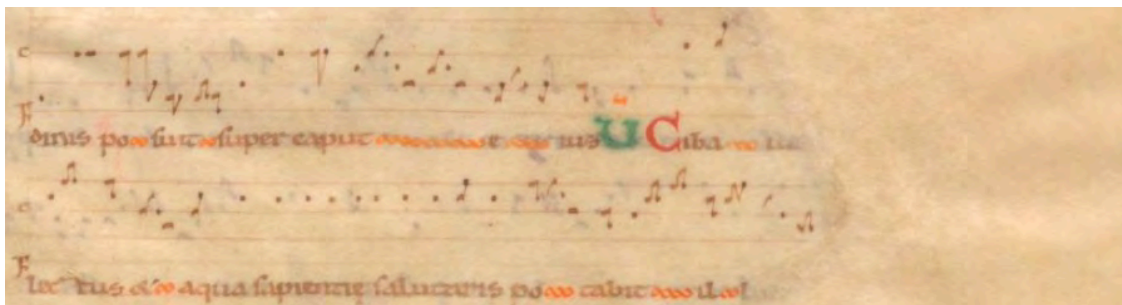(a) **No text, no pitches visible**:
Full text (MS spelling)
• Use curly brackets around a # to indicate the missing text: {#}

Example 18a. Missing pitches with no text. Paris 12044, 230r, *Cibavit illum pane*
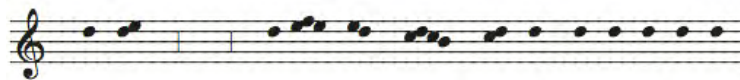
Full text (MS spelling)

Ciba {#} lectus et aqua sapientiae

Volpiano
• Use 6------6 as described above.

Example 18b. Missing pitches with no text. Paris 12044, 230r, *Cibavit illum pane*

Ci- ba   {   lec-   tus   et   a-   qua sa- pi- en- ti- ae

(b) **Partial text visible, no pitches visible**
Full text (MS spelling)
• Enclose the affected text in curly brackets { }
• Use # within the brackets to indicate the location of missing text

Example 18c. Partial text, no pitches.

Full text (MS spelling)

{Corp #} namque proprium

Volpiano
• Use 6------6 in the Volpiano to represent missing pitches

Example 18d. Partial text, no pitches.

{Corp #

19. Using Indexing Notes and Email
Every manuscript has idiosyncratic features not accounted for in these protocols.
• Consult your CANTUS contact in case a new protocol needs to be developed.
• Create an Indexing Note (below the Volpiano field) that clearly identifies the issue
    –Indexing notes should be worded such that they help researchers and Cantus staff

Example 19. Indexing notes

Indexing notes

Right-hand side of folio is damaged; clefs aren't visible. B flats have been used to identify pitches.

Indexing notes

The final pitch of the differentia appears to be missing.

Indexing notes

There are two cues following the Verse, including a lengthy melisma.
The melisma appears to be an embellished section of the repetendum to be sung only during the
repetition of the Respond, after the Verse.

20. Other questions
For "short-term" transcription questions that can likely be answered by a Cantus supervisor
• Use the "question mark" within the Volpiano field as a personal reminder
• Make a note of the record; revisit and correct the record as soon as a solution is found

Example 20. Question mark
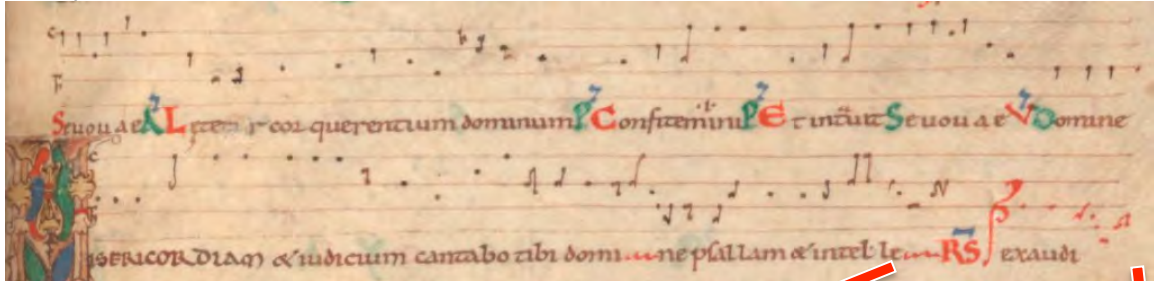
Volpiano Protocols: Beyond the Basics
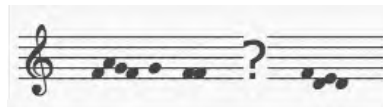
21. Marginalia

Some chants, or parts of chants, are written in the margins of the manuscript.
• If notated marginalia interrupts part of another chant use the line break (7) to indicate breaks within each chant, even if the line continues with further neumes from another chant

Example 21a. Paris 12044, 37r

Primary chant   **Chant in margins**

22. Differentia in the Margins

Note: Transcription of differentia in the margins is decided on a manuscript-by-manuscript basis. Transcribers need not notate differentia in the margins unless otherwise advised.
• If the differentia in the margin appears in line with the end of the relevant antiphon:
– Transcribe as usual, as if it is continuous with the end of the antiphon

• If the differentia is in a more arbitrary location relative to the antiphon:
– Include a 7 immediately before the first differentia pitch

Example 22a. Differentia in the Margin and before the end of the antiphon
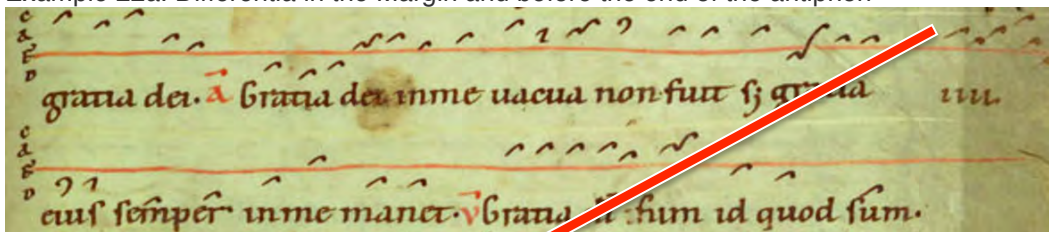
Klosterneuburg 1012, 18r

23. Verse with Two Cues
When there are two cues after a Verse (or a cue and an alternate melisma, as below):
• Indicate each using a single barline

Example 23. Verse with repetendum cue and alternate melisma

• Also: indicate the corresponding location of the cue in the *Responsory* record

24. Manuscript barlines
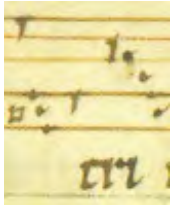If a special decision has been made to transcribe manuscript barlines:
• use the 6 *immediately* after a neume to indicate the location of a manuscript barline

Example 24. Manuscript barlines

Volpiano Basics

1. Indicate the ASCII characters for each of the following in Volpiano

Example: Single barline: _3___

(a) Treble clef: _____   (d) Thin double barline   _____

(b) Middle C: _____   (e) Page break   _____

(c) B flat (3 possibilities)   _____   (f) B natural (3 possibilities)   _____

2. Insert the correct hyphenation for each of the following:
(examples from Utrecht 406, 5r)

(a)   do   mi   no

(b)   re   pel   lit   do   mi   nus

3. Indicate correct hyphenation: text-appropriate spacing OR two spaces between syllables

(a)   Differentia: _____   (c)   Psalm incipit: _____
(Salzinnes, 4v)

(Utrecht 406, 5v)

(b)   Repetendum cue   _____

(Riesencodex 466r)

4. Indicate whether the given transcriptions of flats and naturals are correct or incorrect.
(Dendermonde 153v and Riesencodex 466r)

(a)   _____

(b)   _____

(c)   _____

5. Which barlines would you use for the following chant combinations

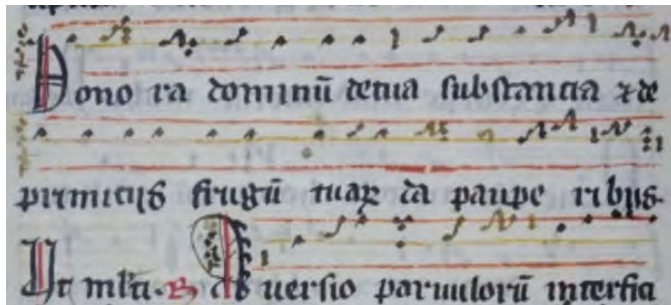(a) Complete Antiphon and Differentia: _____

(b) Verse and Repetendum cue: _____

(c) Hymn with only one notated verse: _____

(d) Responsory including Repetendum: _____

(e) Antiphon incipit: _____

6. Insert line breaks into the Volpiano transcription of this chant:
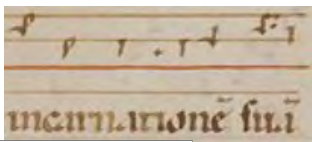

(Klosterneuburg 1018, 201v)

Ho- no- ra   do- mi- num de tu- a   sub- stanti-   a   et   de

pri- mi- ci- is fru- gum tu- a- rum da   pau- pe-   ri-   bus | {Ut multiplicemur

7. Identify the error in the following transcription
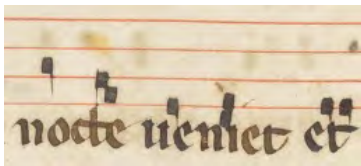

(Riesencodex 466r)

 _____

Beyond the Basics

8. Should the verse *Annunciate* be transcribed DOWN a 3rd or UP a 6th from the last pitch of the preceding responsory? Justify.
(Salzinnes, 4r)

_____

_____

_____

_____

9. Indicate whether the following transcription is correct or incorrect: _____
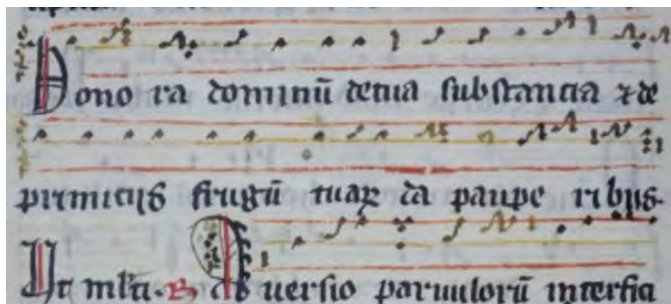(Fribourg 2, 15v)

Volpiano: g--fe---d--cd---6------6---dd

Preview:

noc-te   ve- ni   { et   et

10. This chant is in mode 7. Has the Volpiano been transcribed in the correct range?

(Klosterneuburg 1018, 201v)

Ho- no-   ra   do- mi- num de tu- a   sub- stanti-   a   et   de

pri- mi- ci- is   fru- gum tu- a- rum da   pau- pe-   ri-   bus | {Ut multiplicemur

Answer Key

Self Test 1

1. (a) 1 (b) c (c) y, i, z (d) 4 (e) 77 (f) Y, I, Z
2. (a) do--mi--no (b) re--pel--lit---do--mi--nus
3. (a) two spaces: e--u--o--u--a--e (b) text-appropriate spacing: Et---sic (c) two spaces: be--a--tus--vir
4. (a) Incorrect (b) correct (c) correct
5. (a) ‖ | (b) | | (c) | (d) | ‖   (e) |
6.

7. The two-note liquescent over "-car" should have a small "g", created by keying SHIFT-g

8. UP a 6th (see the custos and compare the repetendum cue with the repetendum)
9. Correct
10. Yes. The range for mode 7 is the G above middle C to the octave above.