Bach to the Future: traditional harmony at A level!

Scheme of work:

Back to basics

- Keys and key signatures revision
- The major scale
- Names of degrees of the scale and why they have those names
- The minor scales
- Intervals

Chords

- Triads
- Types of triad
- Root position triads in major keys
- Root position triads in minor keys
- Triads in first inversion (weak) and second inversion (wobbly) aural recognition
- Chords in open position

Writing in four parts

- Triads + 1 = four part harmony
- Which notes do I double?
- Part writing do's and don'ts

Analysing harmonic language

Melodic decorations

- Passing notes
- Auxiliary notes
- Anticipations
- Accented passing notes
- Suspensions
- Echappees
- Appoggiaturas

Modulations and how they work

Analysing harmonic language in the anthology (extension work)

Aural chord recognition

Revision of common Bach cadence formulae

- General points about chorales
- Perfect cadences Bach style: ii7b – V – I/V4-3 - I
- Cadential 6/4 (look for 878 or 321 in the melody)
- Other approach chords – Ib and IV
- Choosing chords to approach a perfect cadence

- Imperfect cadences with runny bass lines – 3-3-2 or 8-8-7 soprano
- Adding a 9-8 suspension to an imperfect cadence
- V7b/viib/vii7 – I – V as an imperfect cadence
- Approaching an imperfect cadence

Harmonising a melody

- 5 steps to success!
- General part writing points
- Exercises with alternative answers

Bach to A2: Revision of techniques for writing complete Bach chorales

- List of points to remember
- Completing the opening of a chorale phrase
- The passing viib (123, 321, 878, 545)
- Another useful little item for the middle of phrases!

Managing modulations in Bach chorales

- Basic steps
- Using pivot chords
- Abrupt modulations
- Exercises

Spotting mistakes

- Marking example answers

A Rough Guide to Bach Chorale Writing

- Checklist
- Style points
- Exercises

Using chromatic chords effectively

- The supertonic chromatic seventh chord as a secondary dominant
- The diminished seventh chord - #ivdim 7 as an altered version of iv7 before V at a cadence/vii7 as a substitute for V7b in a minor key

Exploring complex part writing

- The runny bass line
- Exercises

Avoiding mistakes and maximising marks at A2

- Common causes of lost marks

Lesson 1

By the end of this lesson you will be able to:

- Feel confident about identifying major keys with up to four (or more) sharps or flats
- Know how to find the relative minors
- Know exactly how to label chords
- Know about the basics of figured bass
- Revise the names of the notes of the scale and why they have these names
- Know about the triads formed of each note of the major scale
- Know about the triads formed on each note of the minor scale.
- Revise how to analyse chords in open position.

For homework:

- You will finish the exercise started in class to identify keys from their key signatures to be peer marked next lesson.

- You will read ahead the sections on Doubling, part-writing pitfalls – overlaps, exposed and consecutive 5ths and 8ves.

Evaluate what you learned in the first lesson and write your thoughts on this below:

After the first lesson, I feel confident about:

I feel OK (but not 100% confident about):

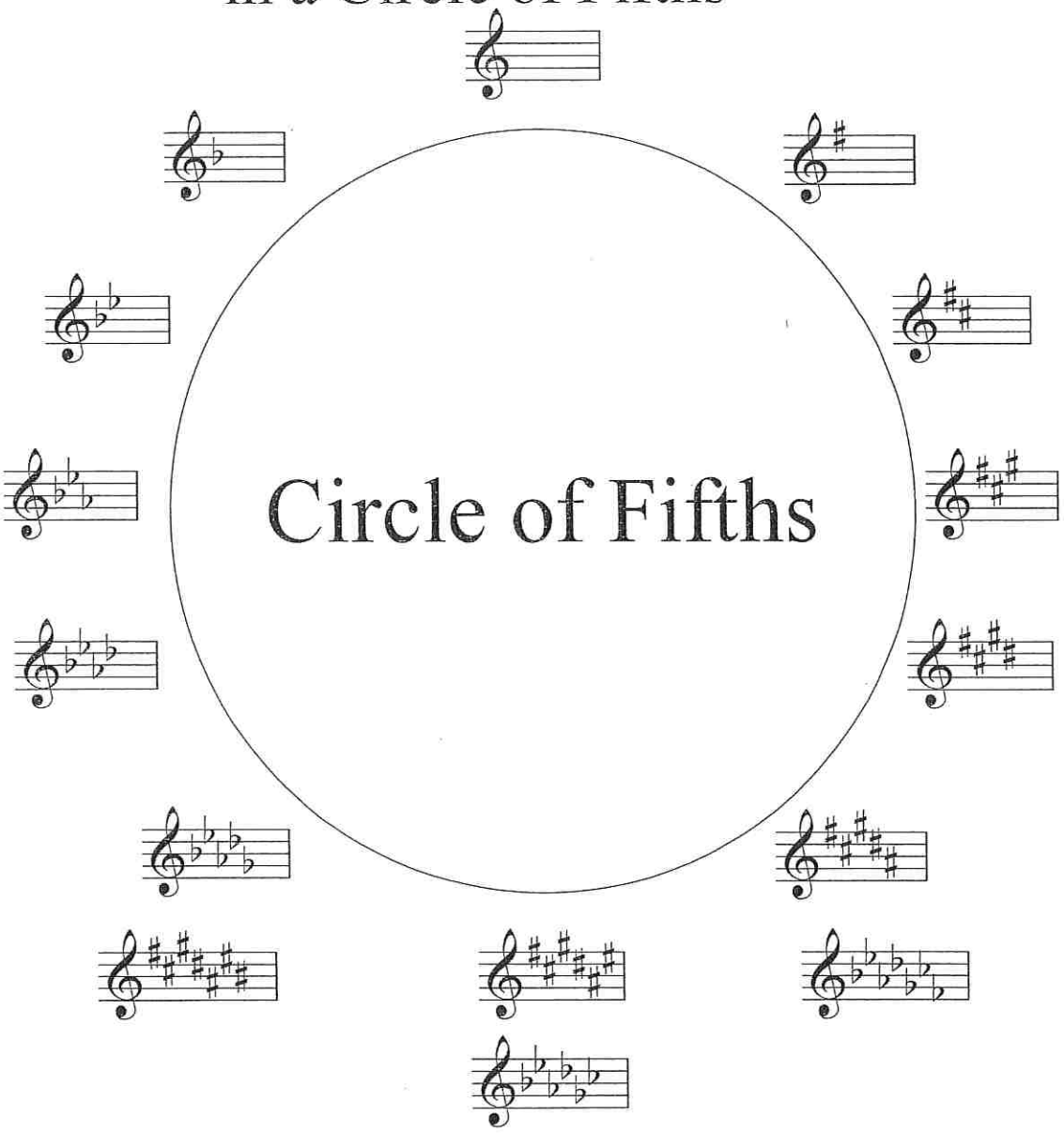
I think that the items I will need to keep revising are:

June 19, 2011

Name _____

Class _____

Write Tonics of Major Keys in a Circle of Fifths



Inside the rim of the circle, write the tonic to match each major key signature.

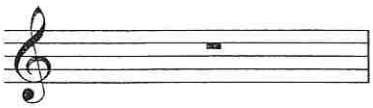
June 19, 2011

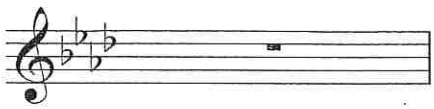
Name _____

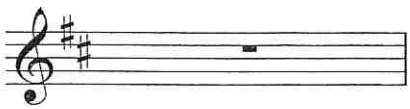
Class _____

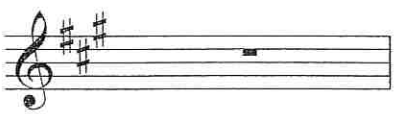
Identify Key Signatures V

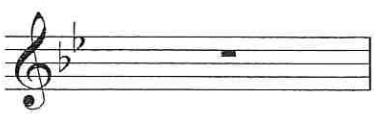
Name both possible tonics for this key signature - Major and Minor.

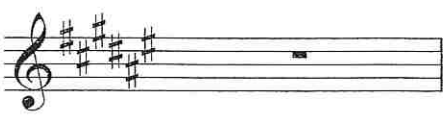
1 

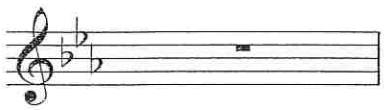
2 

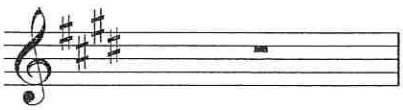
3 

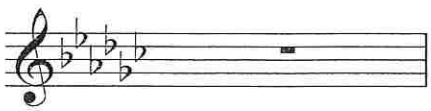
4 

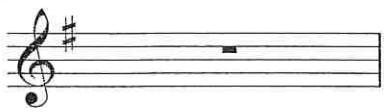
5 

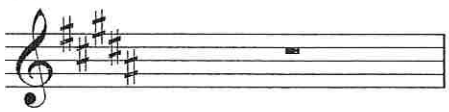
6 

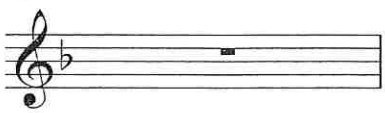
7 

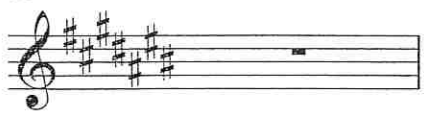
8 

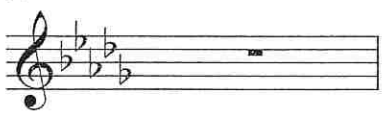
9 

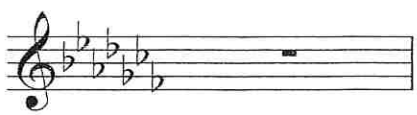
10 

11 

12 

13 

14 

15 

EXTENDED ROMAN NUMERALS

When labelling chords in Bach chorales and harmonic analysis in general from now on please get used to using **extended Roman numerals.**

Major chords = **UPPER CASE** e.g. the chord of C major in the key of C major = I
The chord of F major in the key of C major = IV

Minor chords = **lower case** e.g. the chord of C minor in the key of C minor = i
The chord of F minor in the key of C minor = iv

Augmented chords = **UPPER CASE** and the + sign
e.g. the third chord in A minor would be C aug 5 = III+
because it has the raised 7^{th} at the top of the chord making the chord C, E, G#.

Diminished chords = **lower case** and a ° sign
e.g. the seventh chord in C major would be B dim 5 = vii°
because it has a minor 3^{rd} and a diminished 5^{th} making the chord B, D, F.

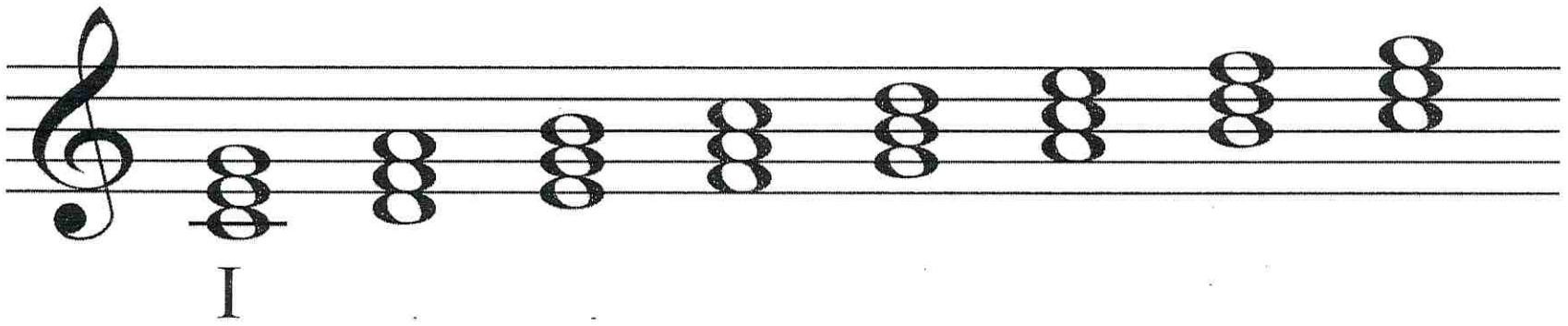
- Just remember major and 'bigger' chords (i.e. augmented) are BIG CASE!
- Minor and 'smaller' chords (i.e. diminished) are small case!

Work out whether the chords on the following two pages are major/minor/augmented/diminished and label them with the correct case of Roman numeral.

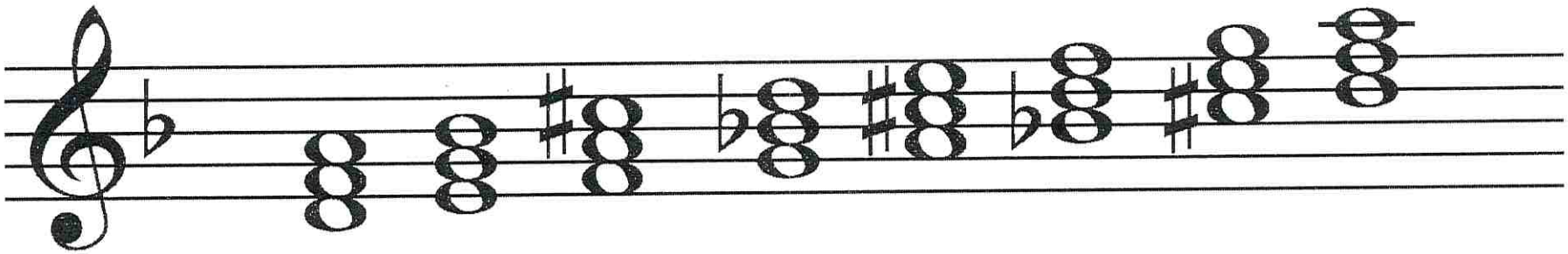
Remember: harmonic minor scales are always used in traditional harmony for constructing chords because they are the same ascending and descending – the only accidental you will need is the raised 7^{th}.

Melodic minors raise the 6^{th} and 7^{th} on the way up but not on the way down and are used to smooth over the augmented 2^{nd} interval that occurs at the top of the harmonic minor scale that gives the latter a slightly 'Arabian' sound! It was devised during the Baroque period to make minor pieces easier to sing and also easier on the ears.

Root position chords in major keys

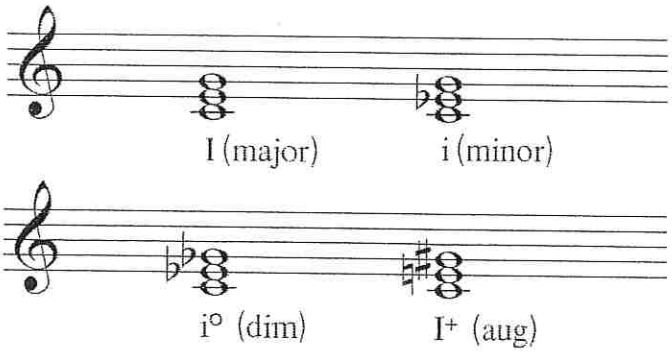


Root position chords in minor keys

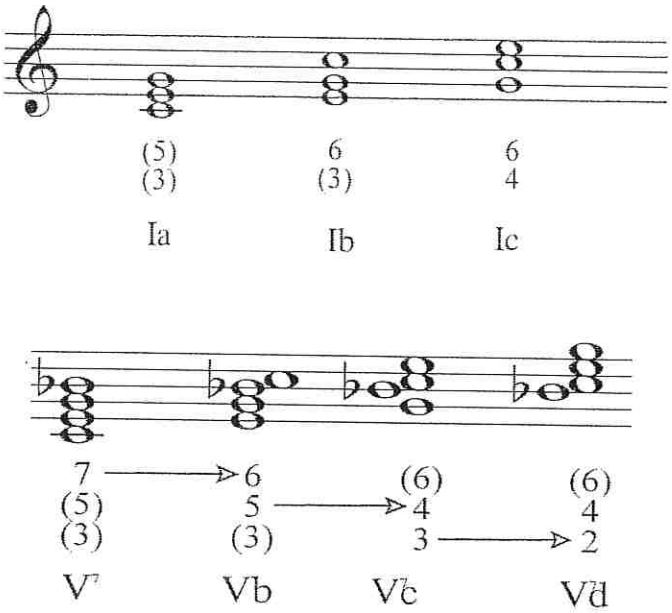


Revision of basic harmonic language

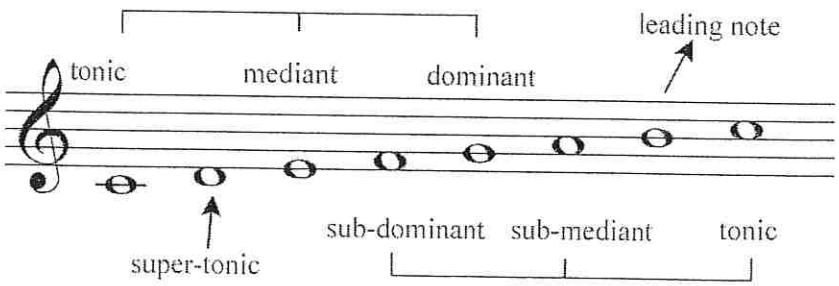
Labelling chords



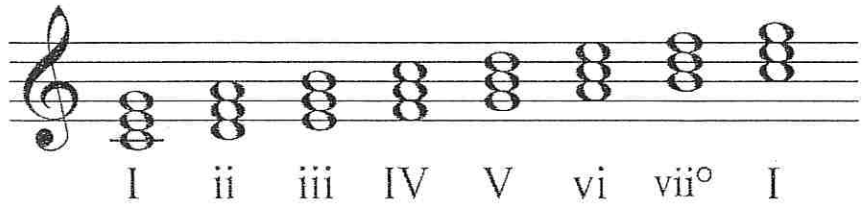
Figured bass/roman numerals and inversions



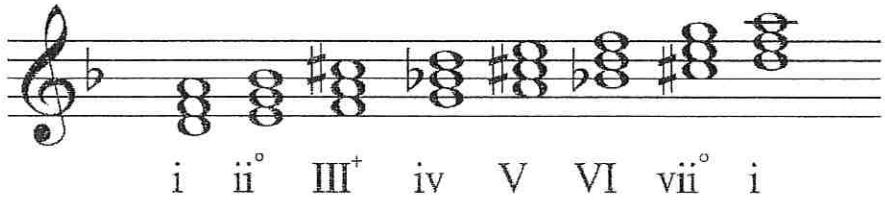
The major scale - naming of degrees



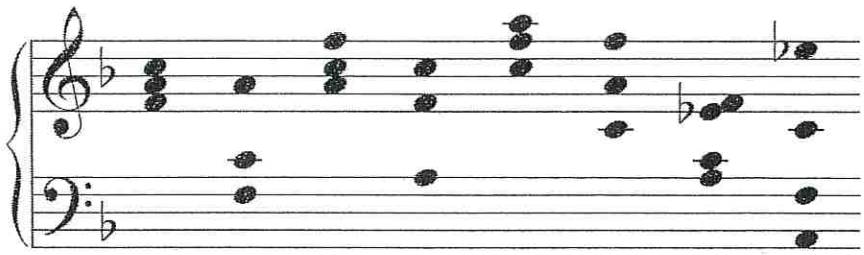
Root position triads in major keys (including types of triad and labelling types of triad



Root position triads in minor keys



Chords in open position



Lesson 2

Mark out of 15 for identification of keys from their key signatures: = ...

(1/2 mark if one key is correct, but not the other with the same key signature)

By the end of this lesson you will have a basic knowledge of:

- Doublings (this will be constantly revisited)
- Part writing pitfalls (this will be constantly revisited)

You will also be able to:

- Analyse harmonic writing, including melodic decorations, with increasing confidence
- Sight sing short passages with increasing confidence
- Identify modulations with increasing confidence

Homework – deadline = Tuesday 28th June (no lessons on Friday 24th and Monday 27th June – Anna is on a course)

For homework you will:

- Complete harmonic analysis exercises as follows:
  1. Pages 18-19
  2. Pages 20-21
  3. Pages 22-23

Extension work:

- Complete as much as you can of pages 24-25.
- Evaluate what you learned in the second lesson and write your thoughts on this below:

After the first lesson, I feel confident about:

I feel OK (but not 100% confident about):

I think that the items I will need to keep revising are:

DON'T FORGET YOUR MUSICAL ERAS PRESENTATIONS ON THURSDAY!

Note doubling:

Root position chords:

- You should normally double the root
- You can omit the fifth (e.g. you can have three roots and a third)
- Never omit the 3rd

First inversion chords:

- Double any note that is note 1, 4 or 5 of the key you are in. It doesn't matter whether the doubled note is the root, 3rd or 5th.
- Alternatively double the root of the chord.
- Never double the leading note

Second inversions: (usually only Ic)

- Double the fifth (bass note)

All chords:

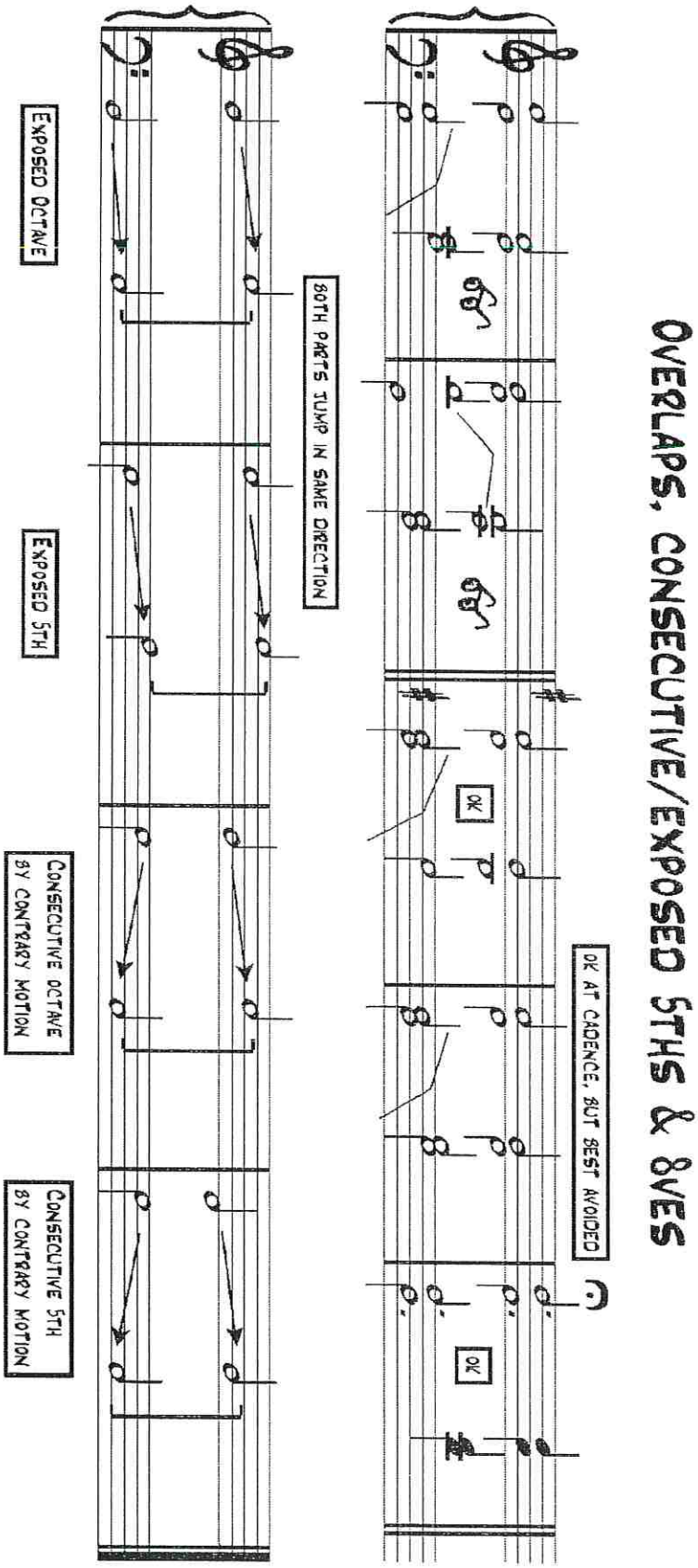
Don't double any notes that tend to act in particular ways

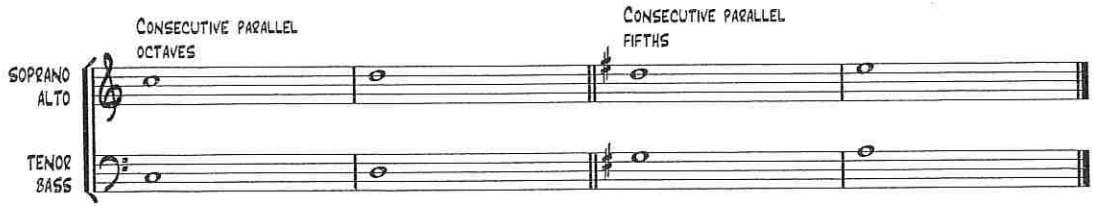
e.g.

- the leading note, which rises
- 7ths, which normally fall
- dissonant notes like suspensions, which resolve.

Any doubling of these notes will cause parallels

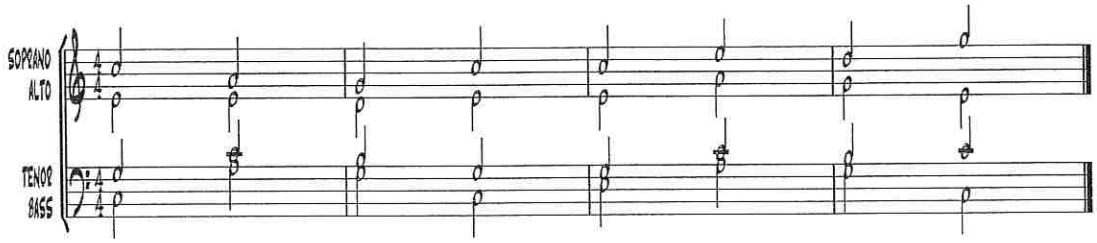
OVERLAPS, CONSECUTIVE/EXPOSED 5THS & 8VES





Spot the mistakes!

There are 11 part writing errors in the extract below. See how many you can identify and mark!



Analysing harmonic language

When we make a harmonic analysis we show how chords work within a key – we describe their **function**.

Visual chord recognition: A step-by-step guide

1. Identify the key

    - Look at the key signature

    - Work out the two keys that share the key signature – a major key and its relative minor

    - To decide between these two keys, look at the bass part of the first few chords. Alternatively, see if you can find the raised leading note of the minor key

    - Check by looking for a perfect or imperfect cadence in the key you have chosen

2. Work out the related keys

    - The tonic & its relative major/minor
    - The sub-dominant & its relative major/minor
    - The dominant & its relative major/minor

3. Make a chord chart.

   You can do this in two ways, either

   a) From the bass up:

7th (d)		G			C			
5th (c)	D	E	F#	G	A	B	C	D
3rd (b)	B	C	D	E	F#	G	A	B
root	**G**	**A**	**B**	**C**	**D**	**E**	**F#**	**G**
G major	**I**	**ii^7**	**iii**	**IV**	**V^7**	**vi**	**vii^o**	**I**

   b) From the bass across:

I	G B D
ii^7	A C E G
iii	B D F#
IV	C E G
V^7	D F# A C
vi	E G B
vii	F# A C

4. Look at each chord individually

   List the notes in the chord, ignoring any doubled notes. Match these notes with the notes in your chart.

5. Note the position the chord is in with your chart.

   Other things to bear in mind:

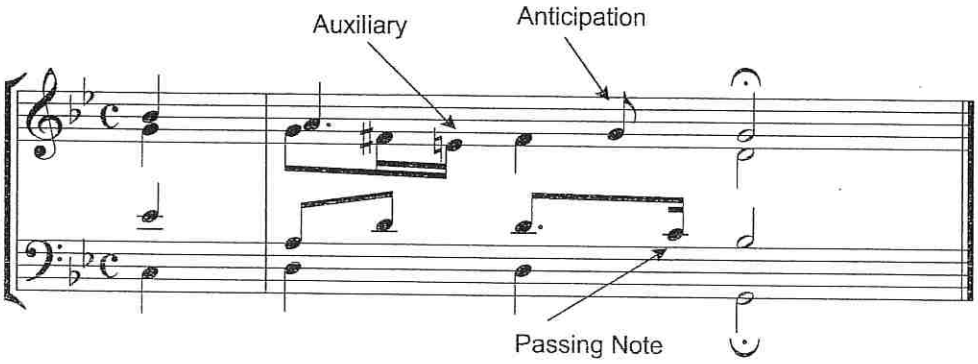
   - **Missing 5ths** - sometimes you will only see two notes in a chord. Remember, the 5th of a chord can be omitted, so assume that the missing note is the 5th of the chord.
   - **Melodic decoration...**

Melodic decorations

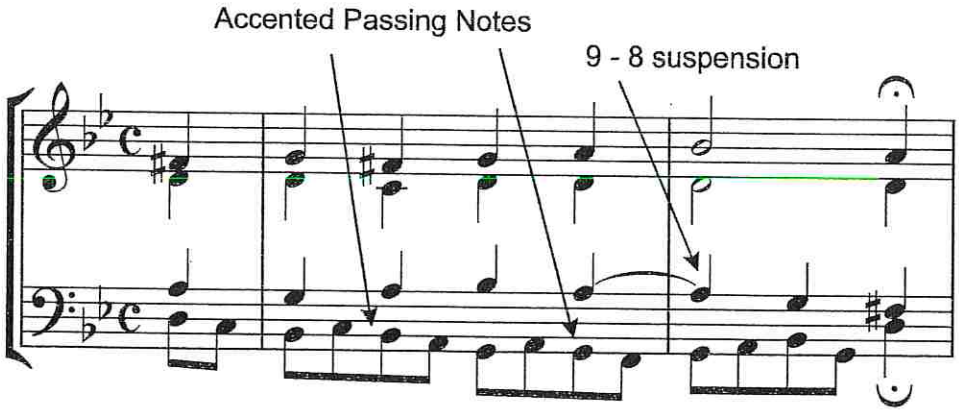
Passing notes are the most common type of non-chord note. A passing note can be found/inserted where there is a gap of a third between chord notes.

Auxiliary notes can be found a step above or below two harmony notes of the same pitch.

An **anticipation** occurs on a weak beat. It anticipates the next harmony note by introducing it before the rest of the chord. They are often found just before chord I in a perfect cadence.



Accented passing notes happen on the beat and create a harmonic conflict or dissonance with the underlying chord.

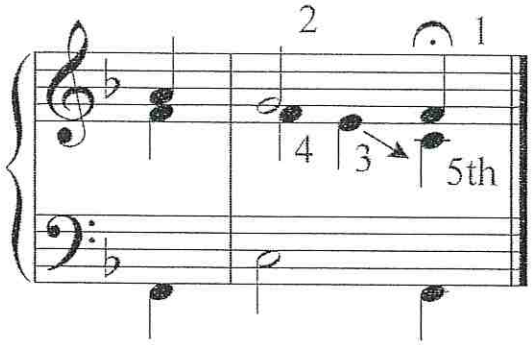


Suspensions

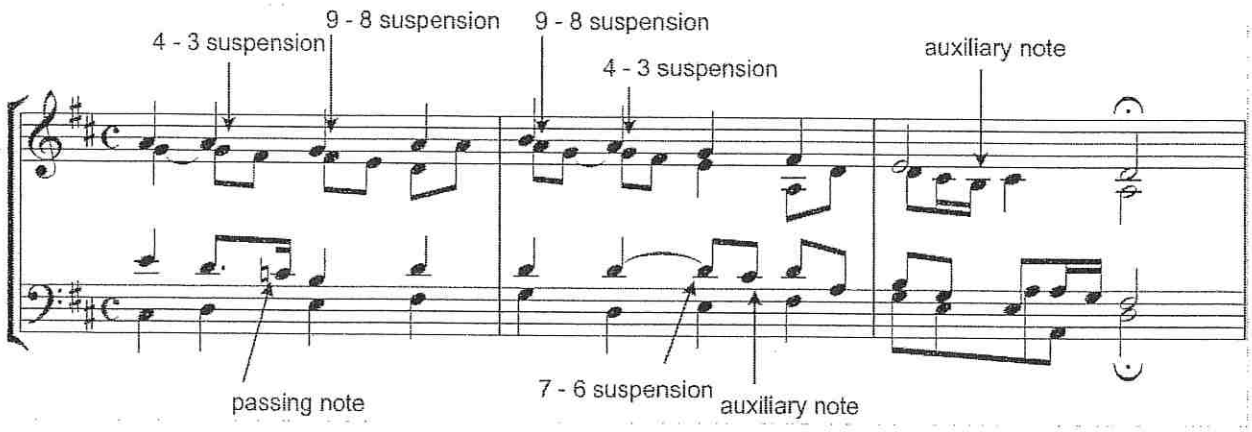
A suspension can occur when chords change. One part hangs on to a note from the old chord, creating a clash with the bass part of the new chord. The delayed part falls by step to a note that belongs to the new chord.

There are three 'stages' to a suspension:

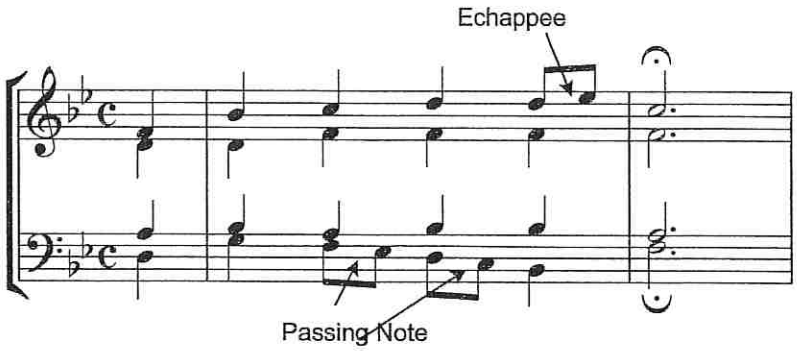
1. **Preparation:** the note that will cause the suspension is heard as a part of a normal chord, usually on a rhythmically weak beat
2. **Suspension:** the prepared note is held over (or repeated) as the other parts move to a different chord on a stronger beat, creating a dissonance between the bass and the suspended note
3. **Resolution:** the suspended note falls by a step to a note of the new chord in order to resolve the dissonance



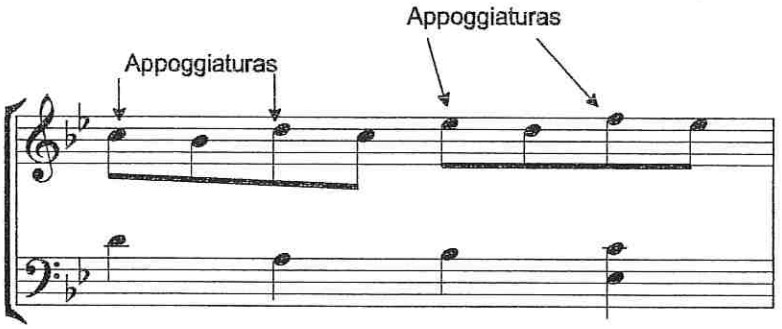
Suspensions are classified according to the intervals between the suspended parts and the bass:



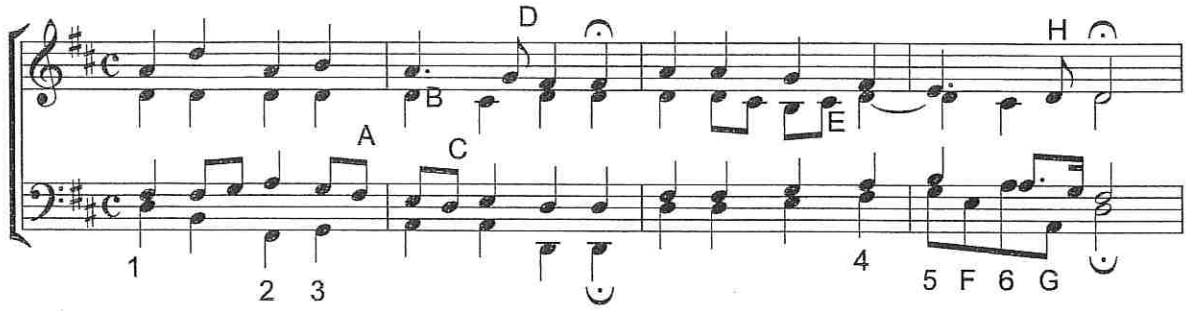
An **échappée** (or 'escape note') is a note that moves a step above a harmony note and then leaps in the opposite direction (usually by a third) to a new harmony note.



An **appoggiatura** (or 'leaning note') is like a suspension without the preparation. It is usually approached by a leap.



Analyse this!



Key : _____

Identify the following chords:

1	
2	
3	
4	
5	
6	

Identify the following melodic decorations:

A	
B	
C	
D	
E	
F	
G	
H	

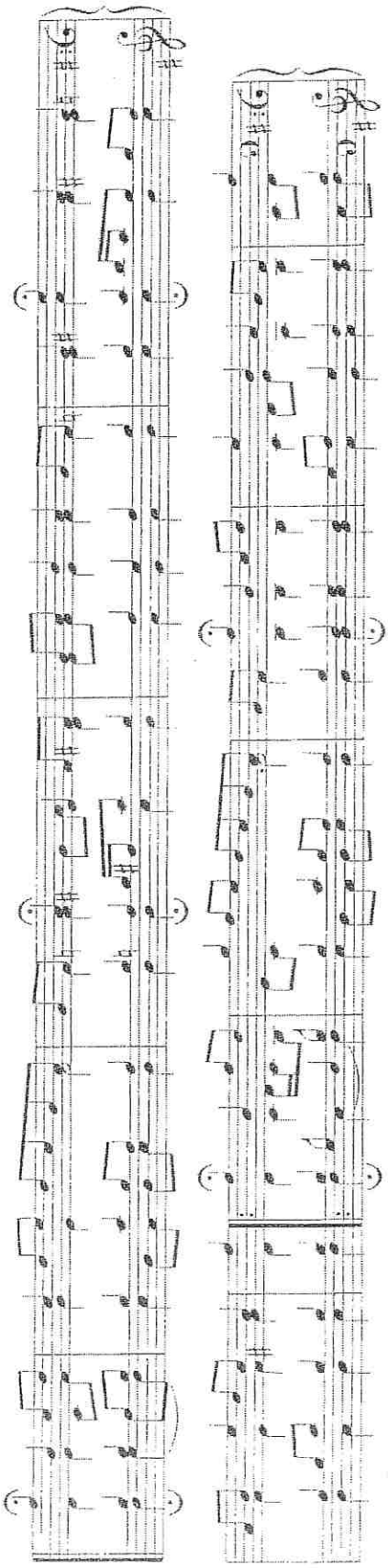
Identifying modulations

- What is the key at the beginning of the piece?
- What is the first note you can find outside this key?
- Does this note soon reappear, and is it part of a perfect cadence?
- What key is suggested by this new note (and cadence)?
- How is the new key related to the opening key? e.g. dominant

The process for identifying subsequent modulations is similar, but watch closely to see what happens to notes that have already been altered. A note that is no longer sharpened may indicate a return to the original key, but there may be another modulation soon afterwards. Always expect a modulation back to the tonic at the end.

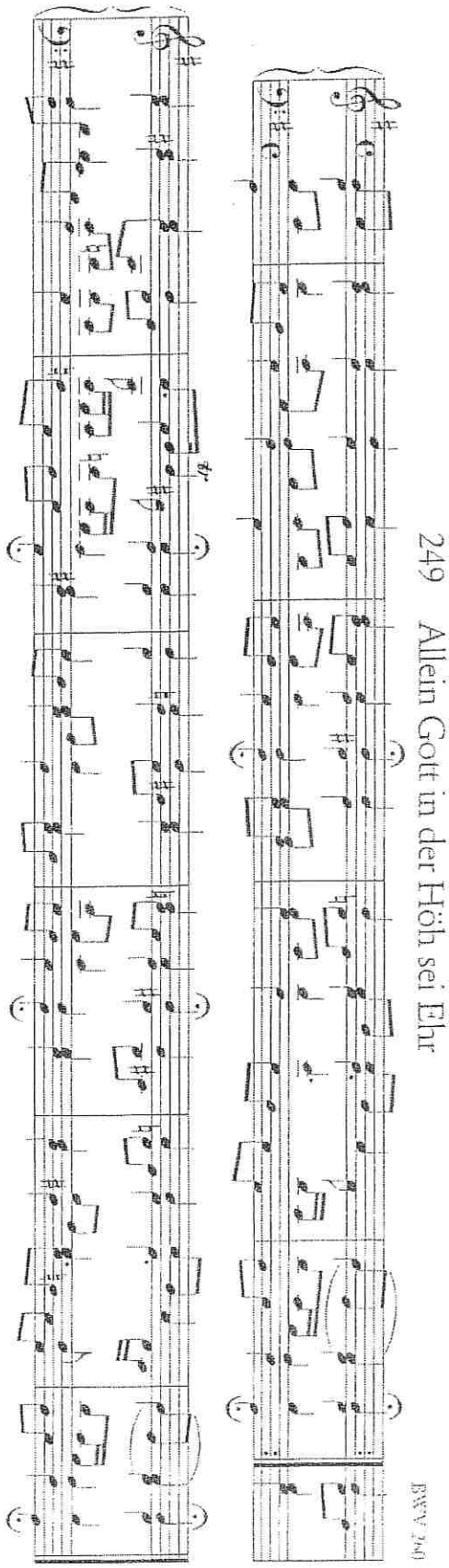
If you need to label chords in a passage that has modulated, remember to state the new key and make sure you base your roman numerals on the new key for the passage concerned.

125 Allein Gott in der Höh sei Ehr (vgl. Nr. 326)



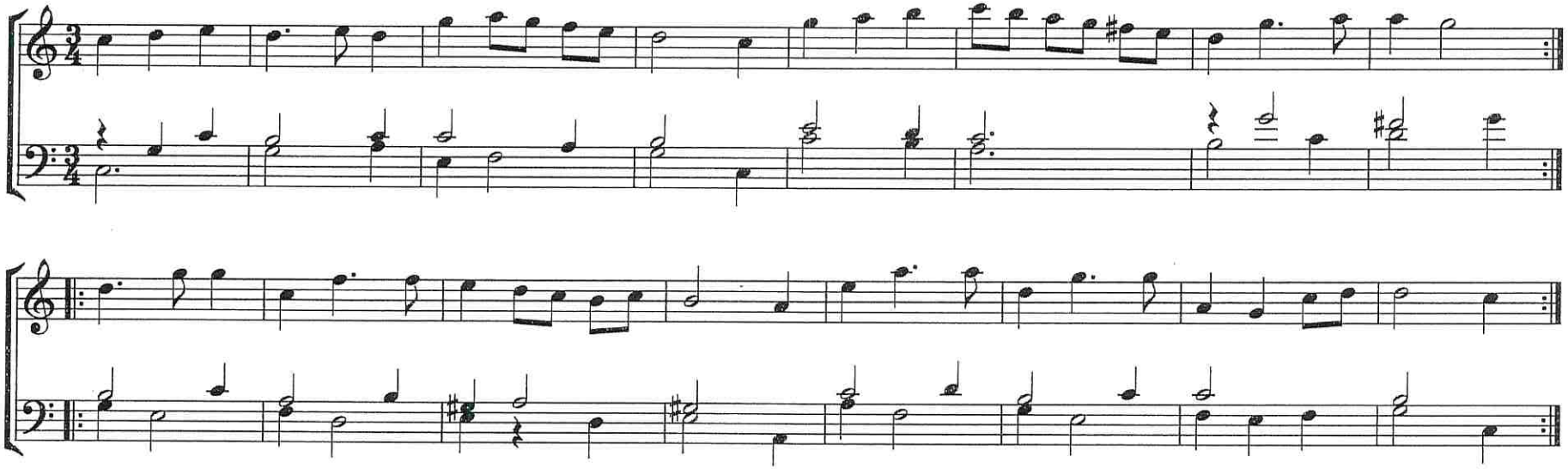
BWV 191.6

249 Allein Gott in der Höh sei Ehr



BWV 240

John Blow (from Rhinegold Harmony Workbook)



PART C: UNDERSTANDING CHORDS AND LINES

4. Study the printed music for this question in the skeleton score booklet and answer all the questions that follow.

(a) Complete the table below to give a harmonic analysis of bars 1 to 7. Precisely indicate, using Roman numerals, the chords that are used.

Bars 1-3	Ic
Bar 4	
Bar 5	
Bar 6 beats 1-2	
Bar 6 beats 3-4	
Bar 7	

(5)

(b) Identify the key at bar 10.

.....

(1)

(c) Identify the chord at bar 11 beat 4

.....

(1)

(d) Complete the sentence below by putting a cross in the box next to the correct answer.

The note E which is the first note in the vocal part in bar 8 is best described as

☐ **A** an anticipation

☐ **B** an appoggiatura

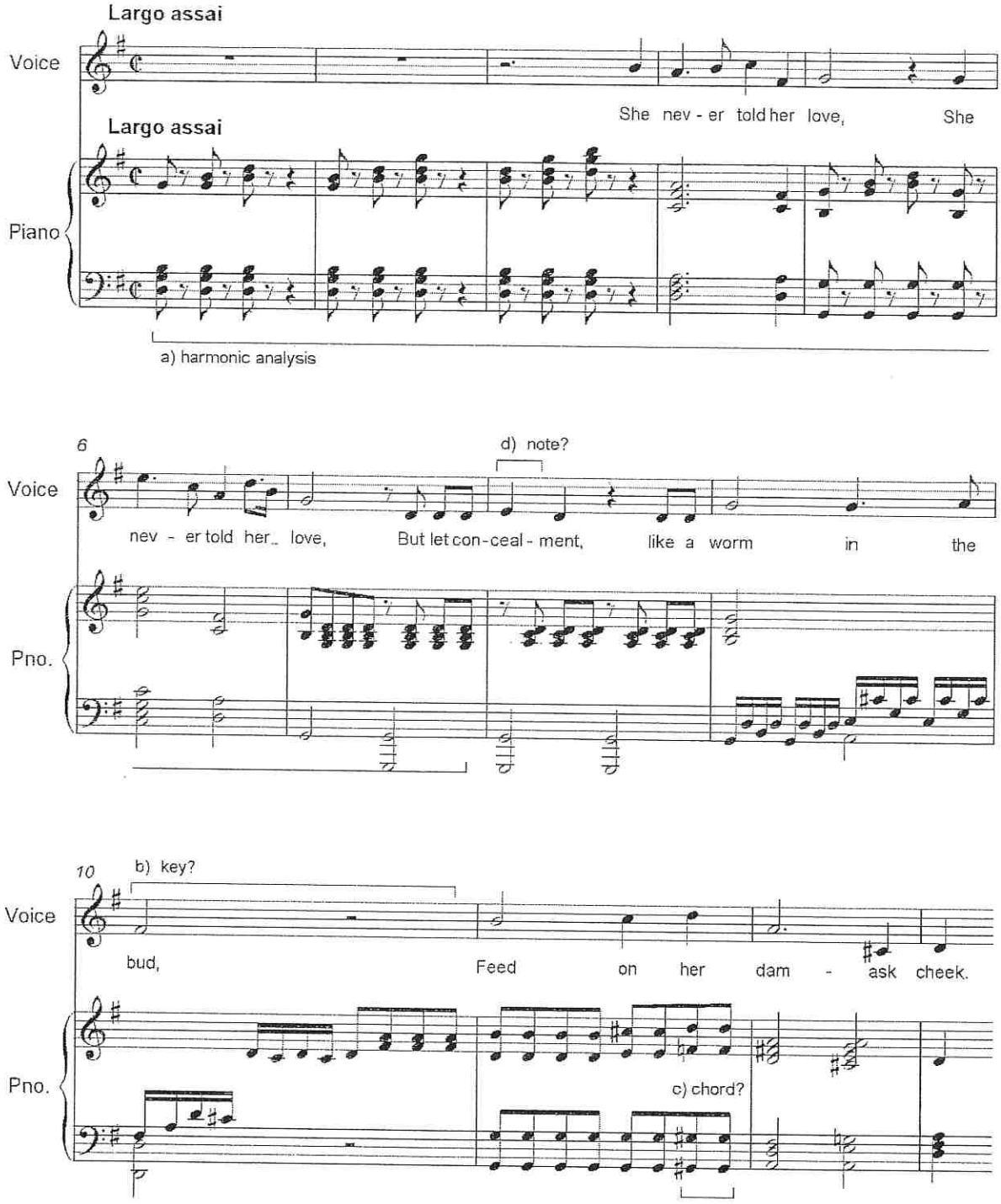
☐ **C** a passing note

☐ **D** a suspension

(1)

(Total 8 marks)

PART C: UNDERSTANDING CHORDS AND LINES



Study the printed music for this question and answer all the questions that follow.

(a) Complete the table below to give a harmonic analysis of bars 9 to 11. Precisely indicate, using Roman numerals, the chords that are used.

Bar 9^1	
Bar 9^3	
Bar 10^1	
Bar 10^3	
Bar 12^1	

(5)

(b) Identify the key in bars 22-23.

.....

(1)

(c) Complete the sentence below by putting a cross in the box next to the correct answer.

(i) The note C which is the first note in the right hand in bar 11 is best described as

☐ **A** an anticipation

☐ **B** an appoggiatura

☐ **C** a passing note

☐ **D** a suspension

(1)

(ii) The note E which is the second note in the right hand in bar 12 is best described as

☐ **A** an anticipation

☐ **B** an auxiliary

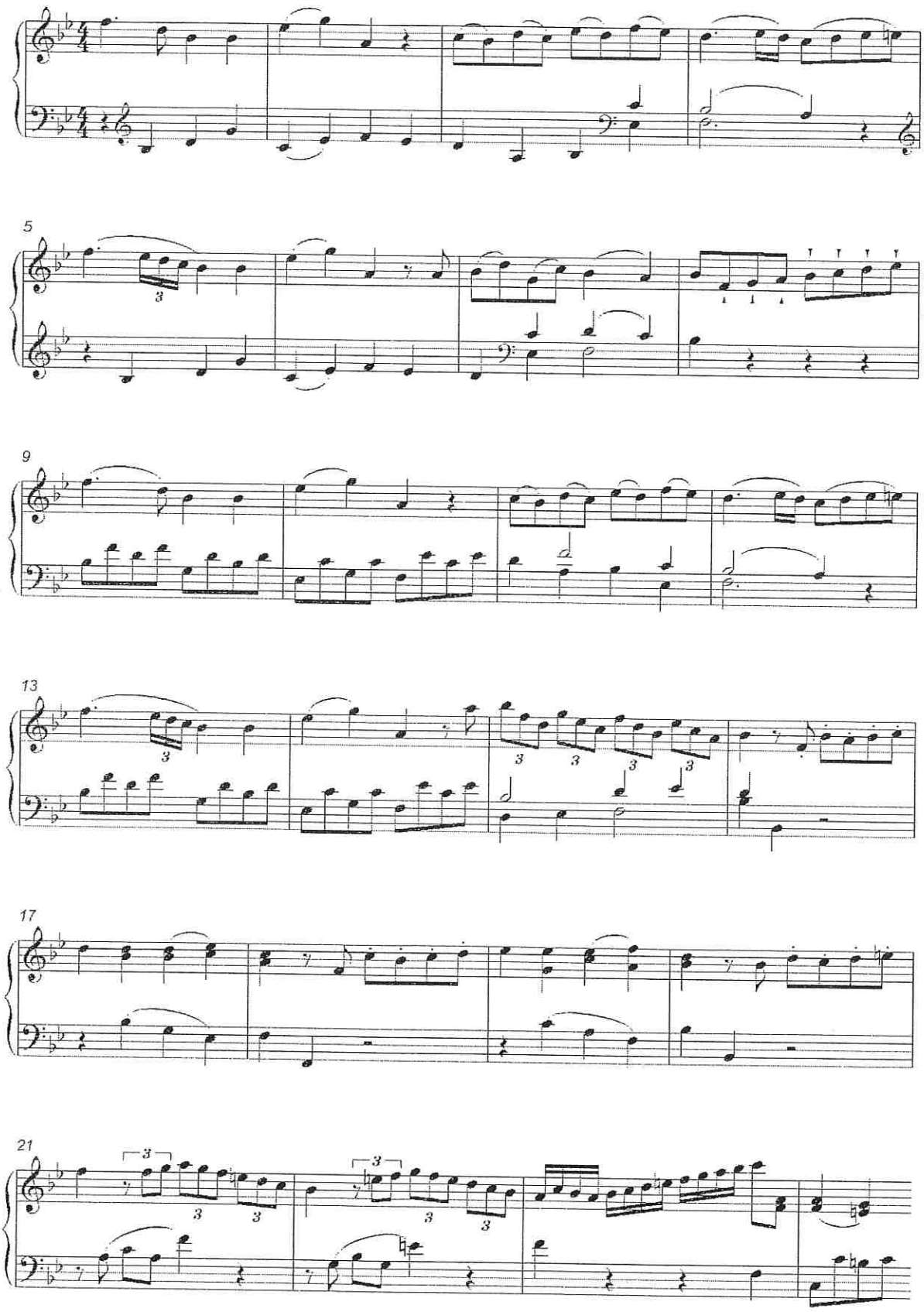
☐ **C** a passing note

☐ **D** a suspension

(1)

(Total 8 marks)

PART C: UNDERSTADING CHORDS AND LINES



Study the printed music and answer the following questions:

(a) Complete the table below to give a harmonic analysis of bars 9 to 19. Indicate, using Roman numerals, the chords that are used.

Bar 9^1	
Bar 9^3	V^7 in G major
Bar 11^1	
Bar 14^1	
Bar 18^1	
Bar 19^1	

(5)

(b) Identify the key at bars 14^3 - 15^1..... **(1)**

(c) Identify the key at bars 15^3 - 16^1..... **(1)**

(d) Complete the sentence below by putting a cross in the box next to the correct answer.

The note E which is the final note in the first violin part in bar 7 is best described as

☐ **A** an anticipation

☐ **B** an appoggiatura

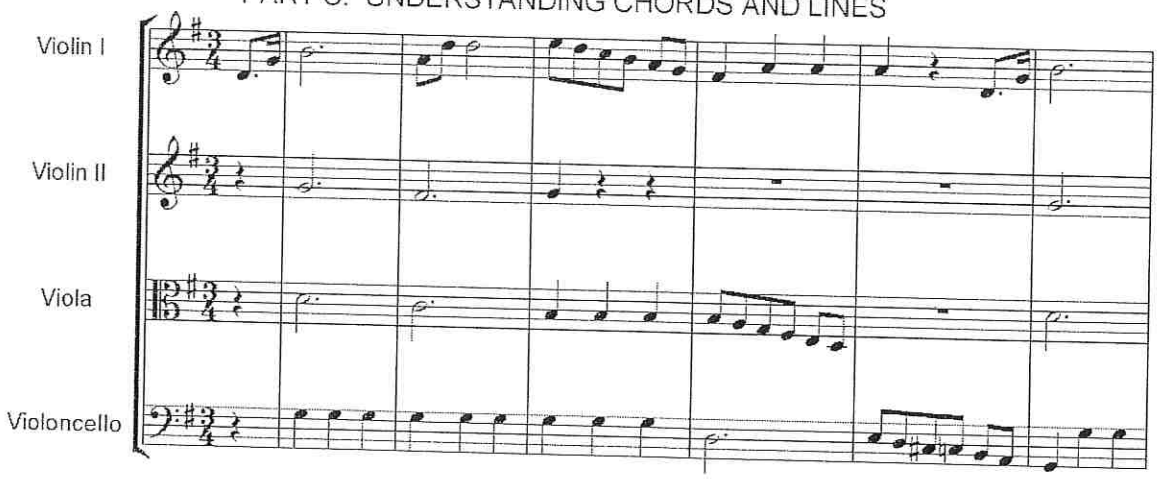
☐ **C** a passing note

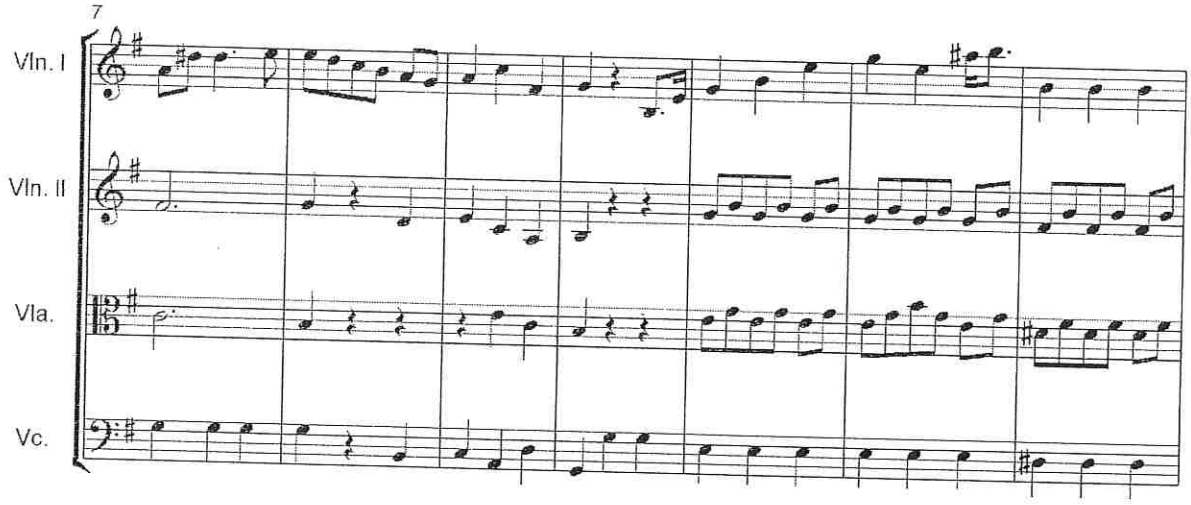
☐ **D** a suspension

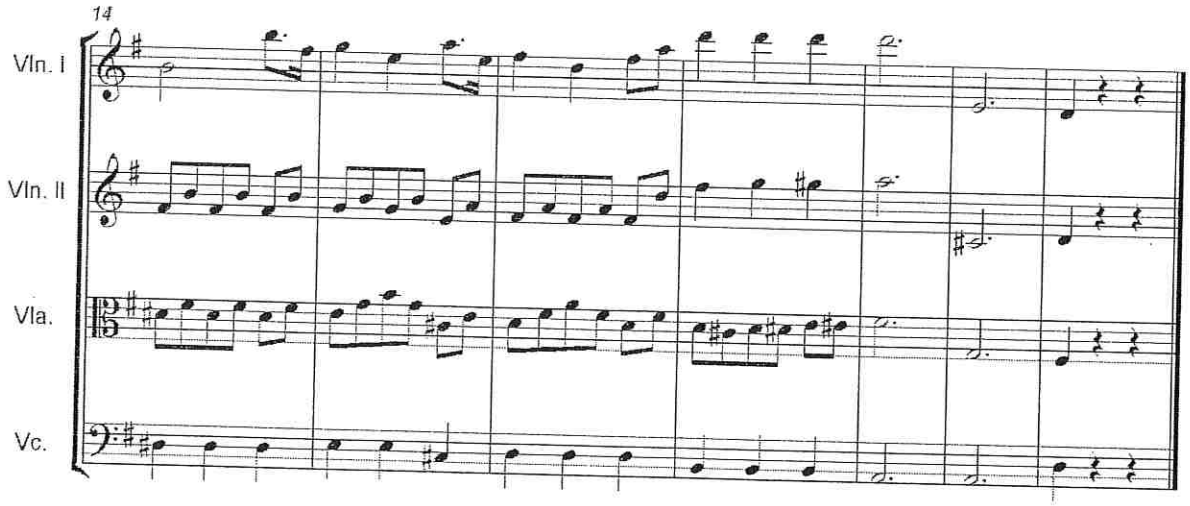
(1)

(Total 8 marks)

PART C: UNDERSTANDING CHORDS AND LINES





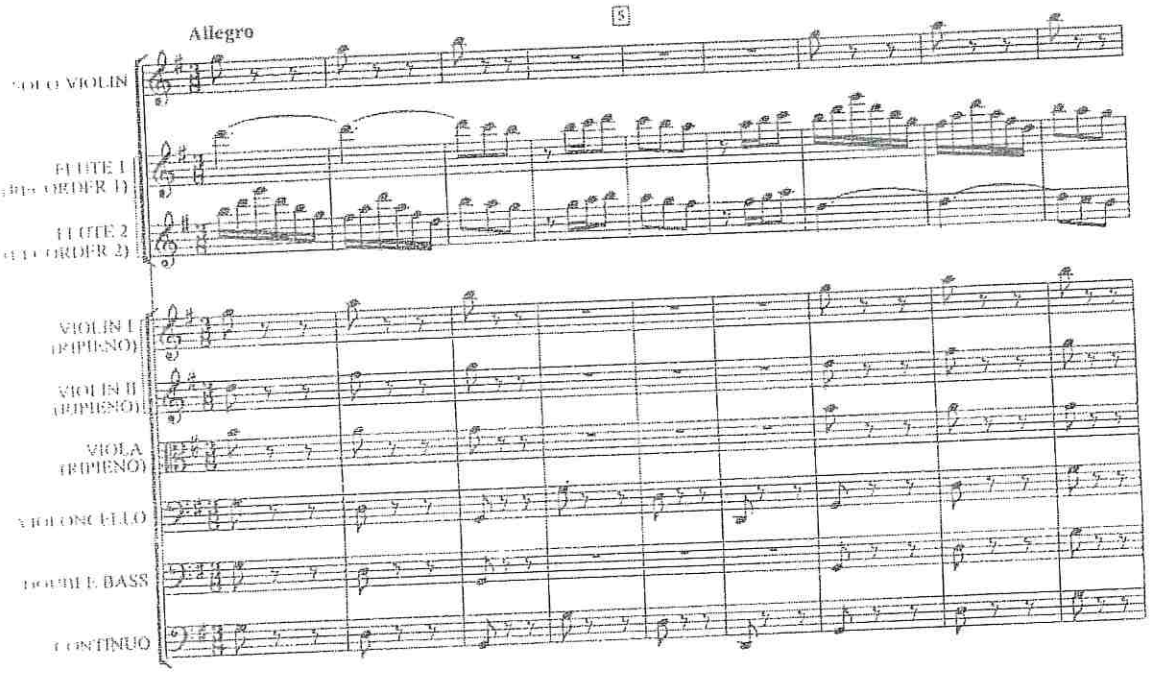


Analysing harmonic language in the anthology

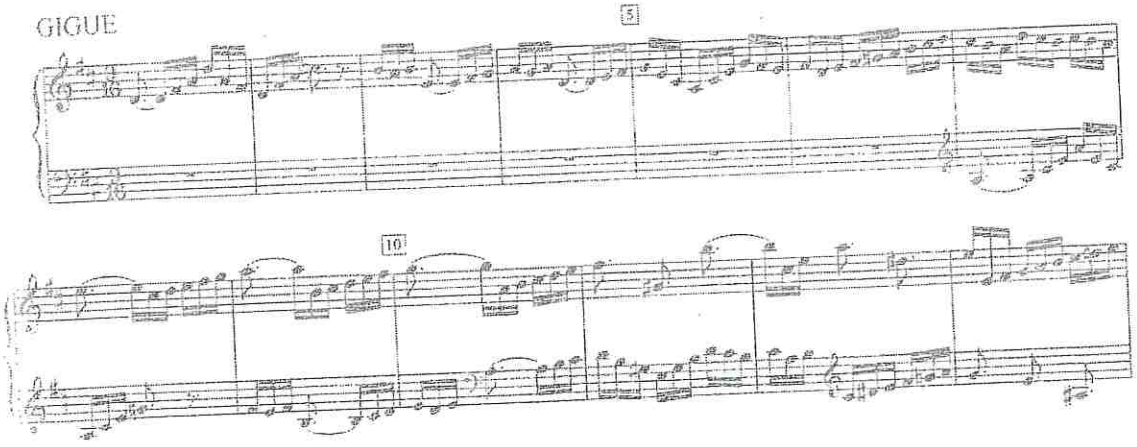
Find examples of things you are covering in harmony classes in the anthology and show how they are applied (and more importantly listen!).

- Look at Bach extracts in the anthology and analyse his use of chords

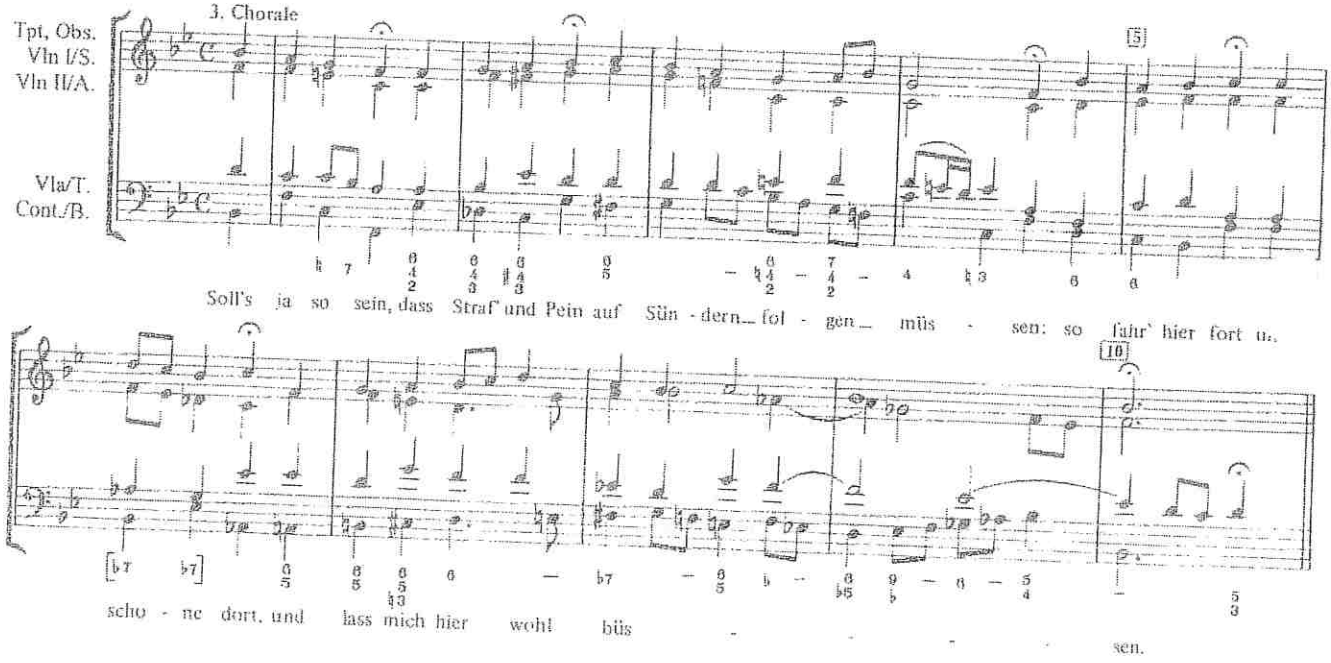
e.g. Consider the functional harmonies at the opening of NAM 1 (and why they are so effective)



e.g. Consider the harmonies used in the Gigue NAM 22



e.g. Look at a Bach chorale in context in NAM 28 and analyse the chords



Other composers:

Consider the importance of the Cadential 6/4 chord in Mozart NAM 22

OR

Consider the range of complex and chromatic chords used in Debussy NAM 24

Aural chord recognition: A brief guide

Identifying root position, first inversion and second inversion chords aurally

- **Strong** (root), **weak** (first inversion) and **wobbly** (second inversion, wants to tumble over and resolve)
- First inversion chords often appear before or after root position versions of the same chord!

Identifying cadences aurally

- **Perfect** (sounds finished, a musical full stop)
- **Imperfect** (sounds unfinished, a musical comma),
- **Plagal** (sounds finished and rather 'resigned' - like an 'amen')
- **Interrupted** (sounds unfinished, like a musical question mark)

Remember, **chords often appear in pairs** (e.g. cadence chords)

Use old Edexcel AS aural papers (Question 4). Attempt an example and then follow up by showing the pupils the **full score**.

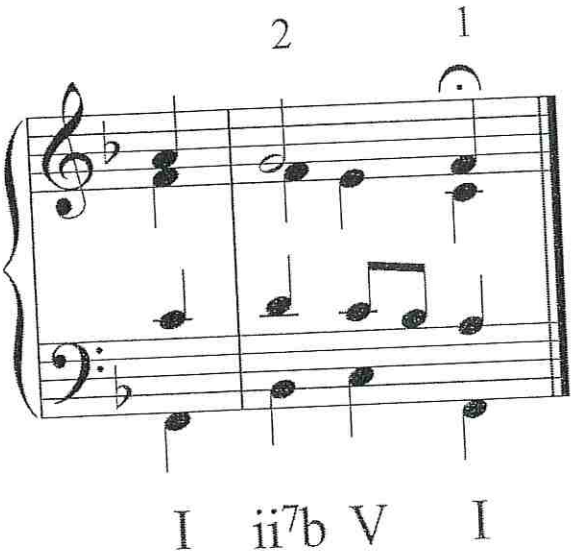
Revision of common Bach cadence formulae:

General points about chorales

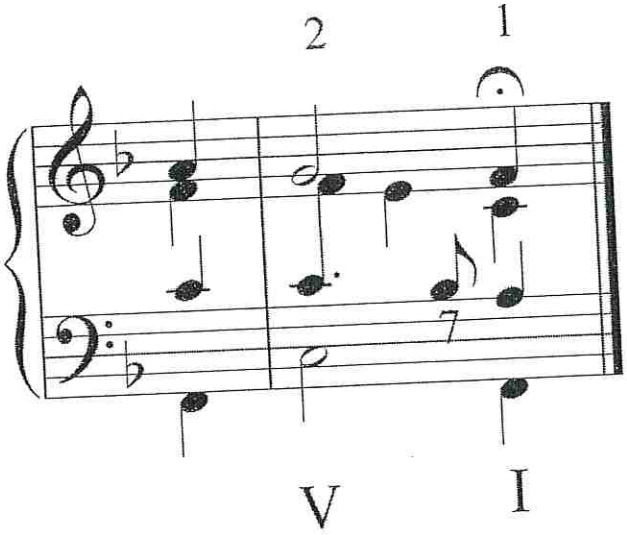
- Each phrase of a chorale ends with a cadence, marked by a pause sign on the last chord of the cadence.
- About 78% of Bach's cadences are perfect (V-I), and about 20% are imperfect (ending on V, and often with the first chord inverted). Don't use plagal or interrupted cadences!
- Primary chords I, IV and V and their inversions are the main chords used.
- Some phrases will modulate to closely-related keys
- Non-chord notes, particularly passing notes and suspensions create flowing quaver movement. For instance, Bach often uses a passing 7th (e.g. V^7).
- Encourage your students to think of each note of the soprano part as a degree of a scale according to the key. This will help them to identify cadential formulae.

Perfect Cadence Formulae:

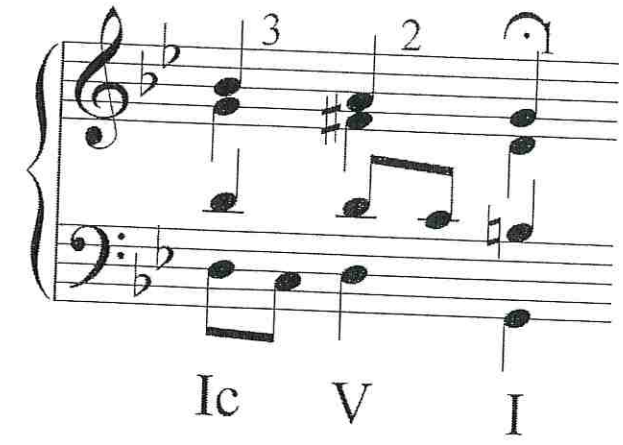
ii^7b - V - I

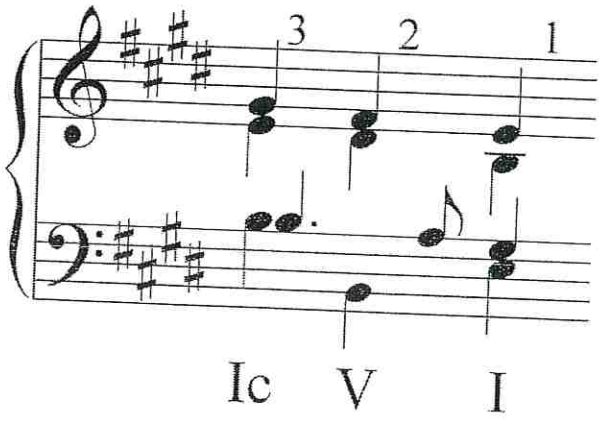


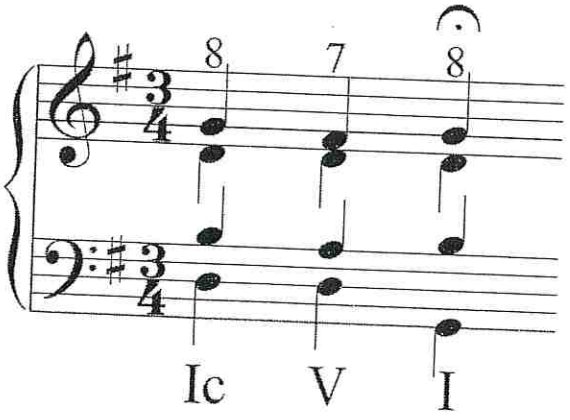
V^{4-3} - I



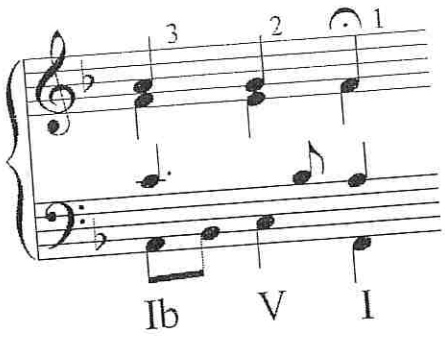
Cadential **6 (look for 878 or 321 in the melody)**
4



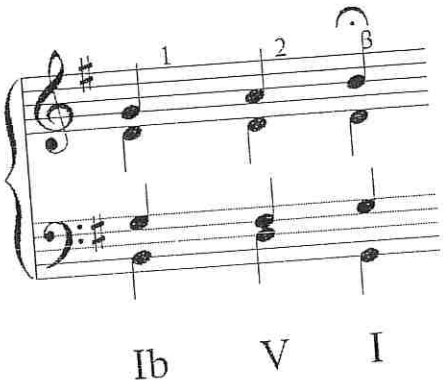




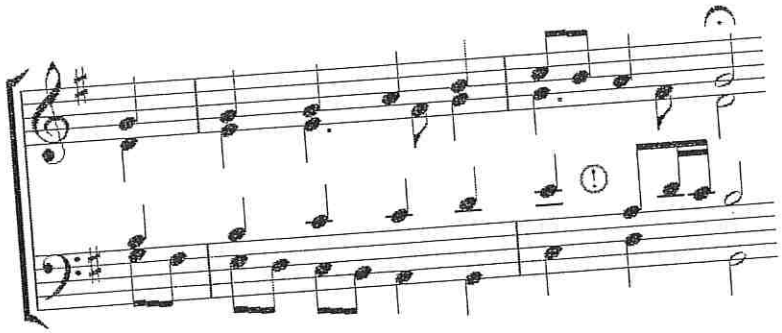
Chord V at a perfect cadence is often approached from Ib (look for 3-2-1)



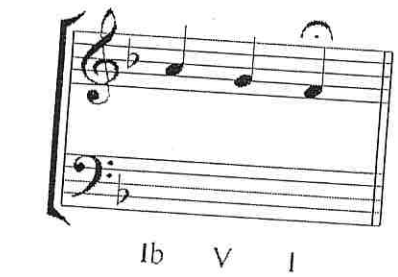
Chord V at a perfect cadence is often approached from Ib (look for 1-2-3)

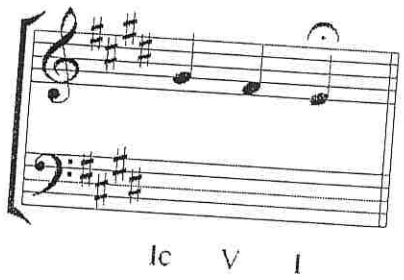


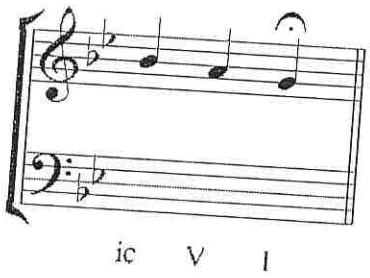
Chord V may approached by IV when the soprano moves 4-3-2-1

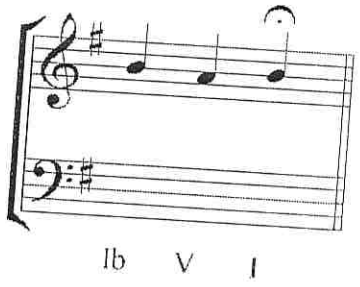


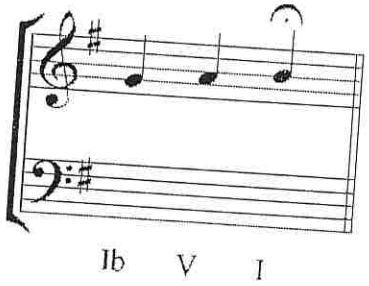
Choosing chords to approach a perfect cadence

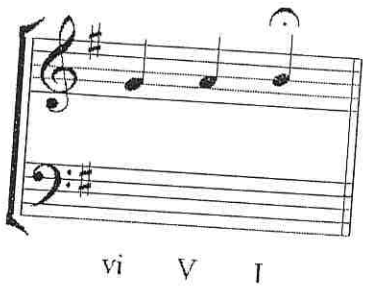


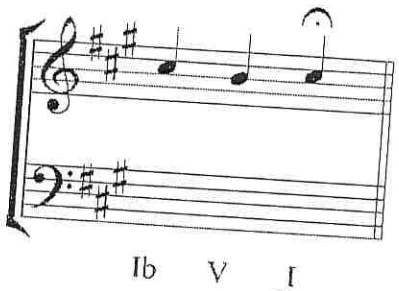


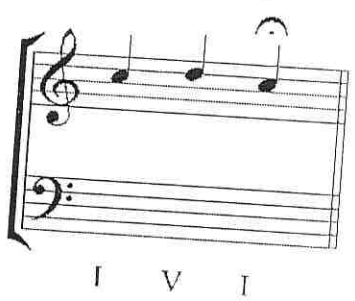


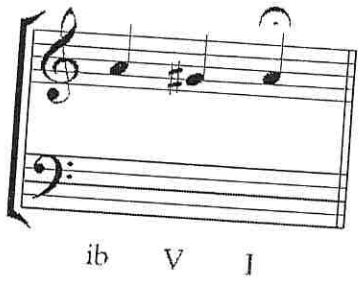


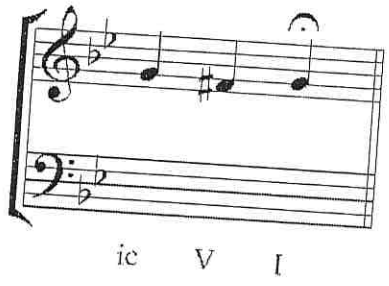


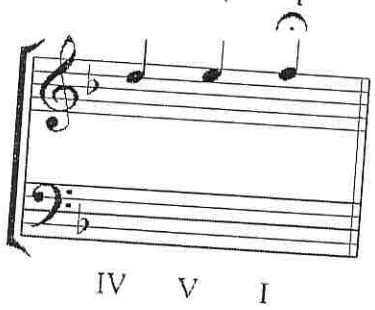


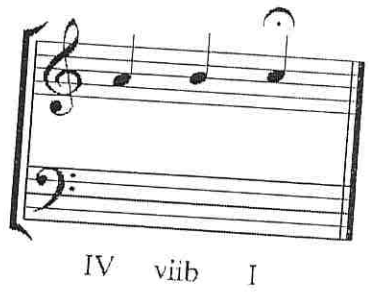




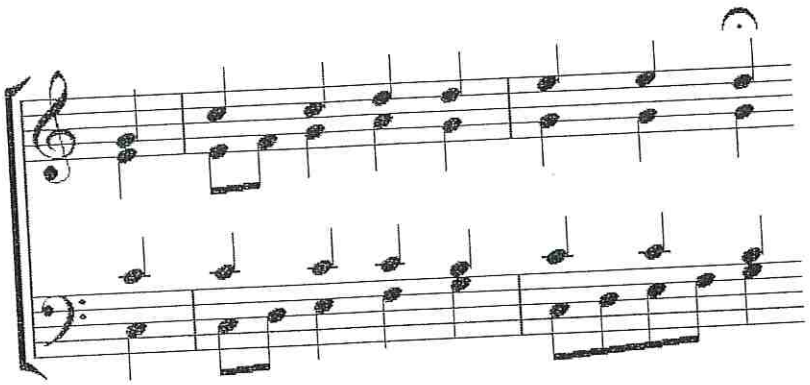




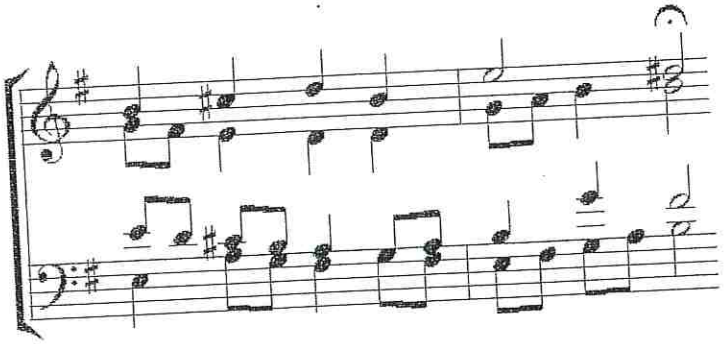




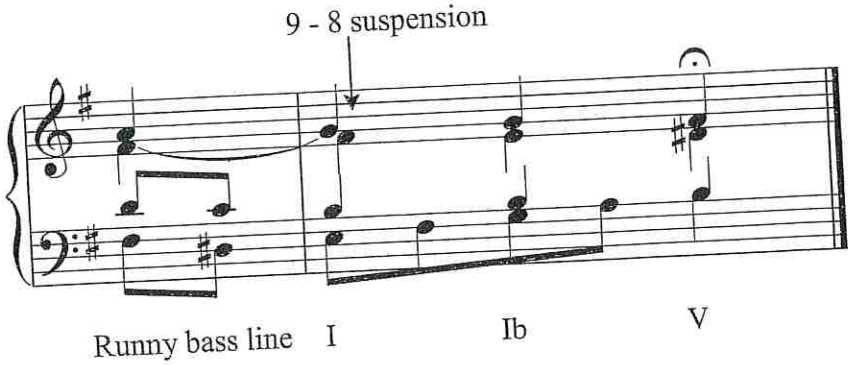
Imperfect cadences often feature 'runny' bass lines: Look for 3 - 3 – 2 movement in the soprano part.



or 8 – 8 – 7



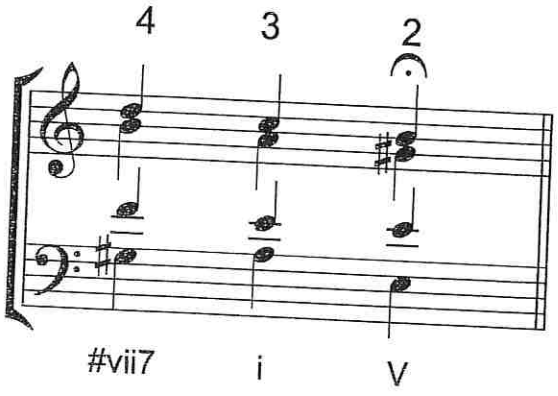
Sometimes a 9-8 suspension can be added

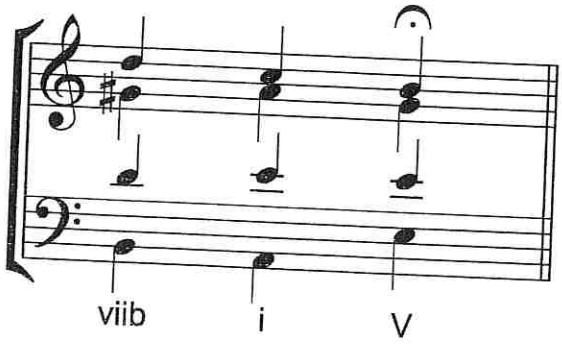


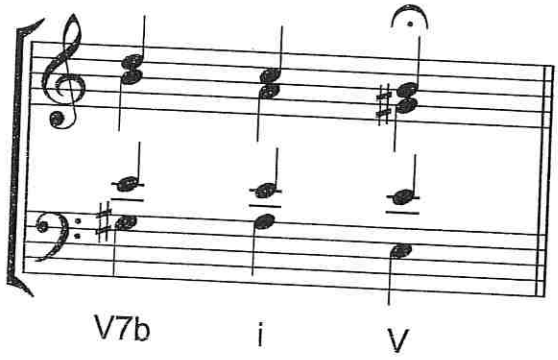
Just as perfect cadences often feature the pattern I/Ib/Ic - V - I...

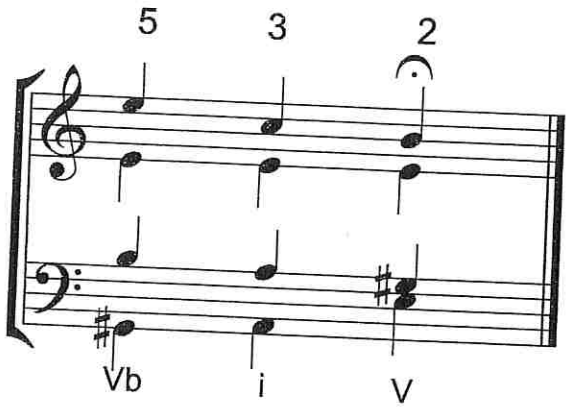
...imperfect cadences often feature V^7b/viib /vii^7 - I – V

Look out for 4 – 3 – 2 movement in the soprano part

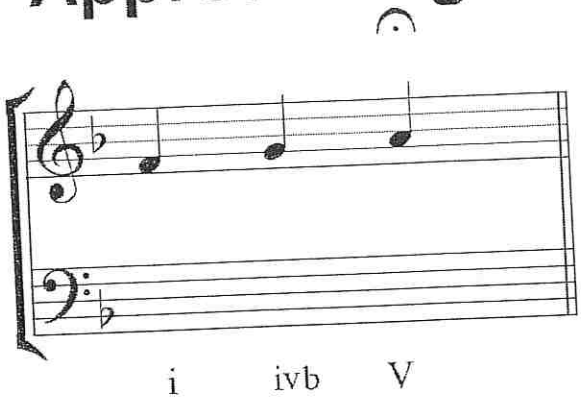


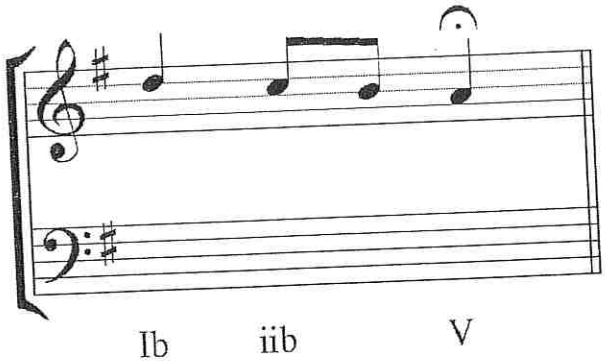


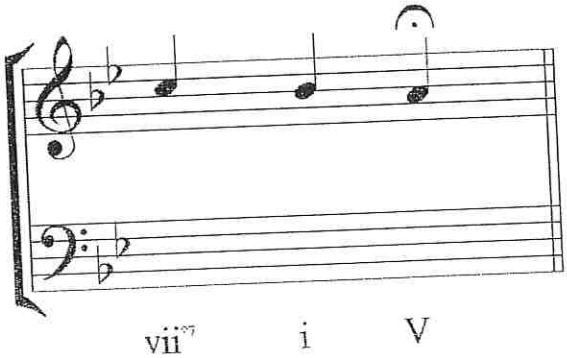


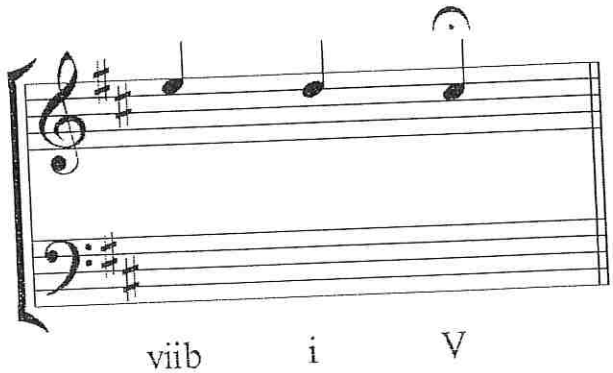


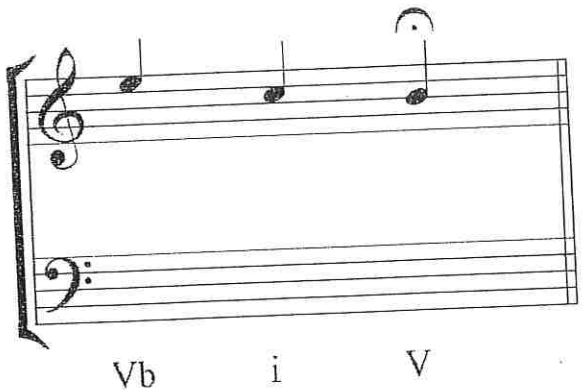
Approaching an Imperfect Cadence

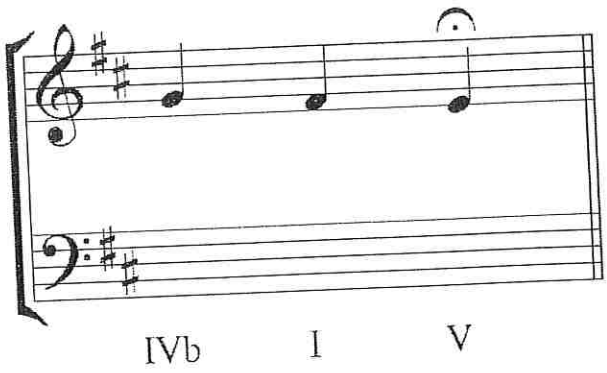


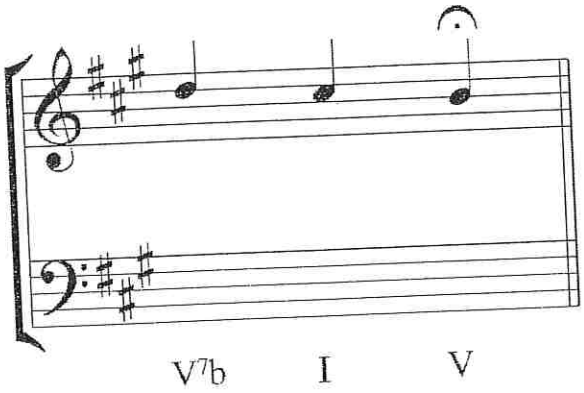


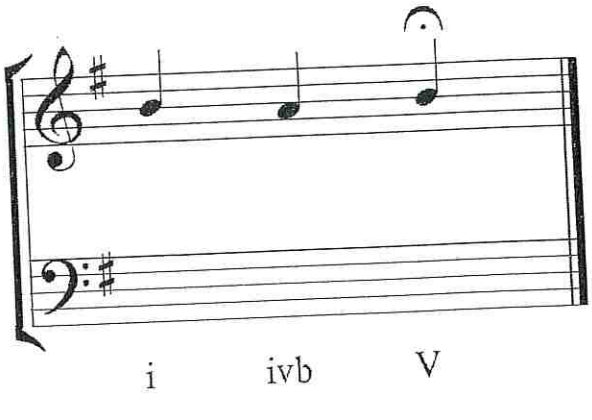












R370 Kommt her zu mir, spricht Gottes Sohn

R3 Ach Gott vom Himmel sieh darein

Harmonising a melody

1. Identify the key and any changes of key.

2. Fill in the cadences first. Look for clues in the soprano part.

3. Work out the approach chord to the cadence, again looking for clues in the soprano part.

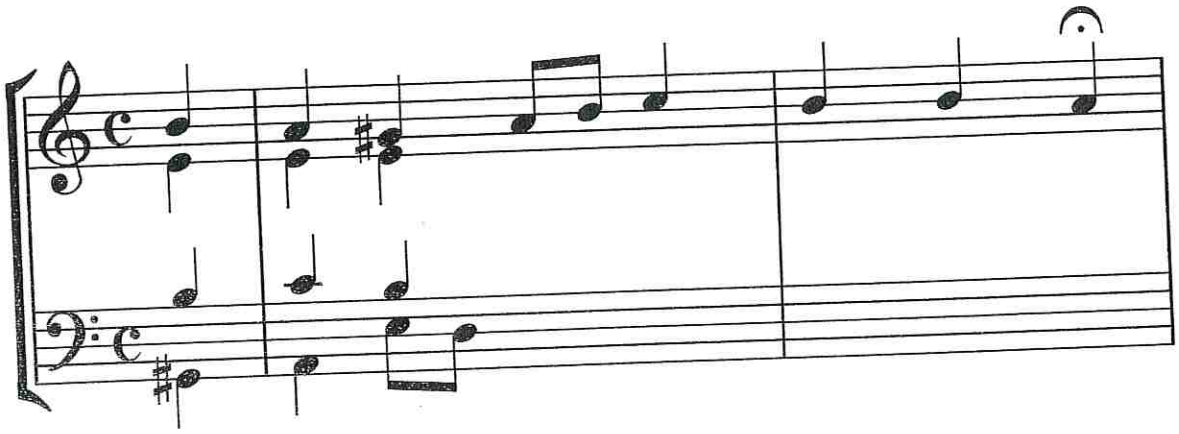
4. Choose chords for the remainder of the example. Add the bass part, roman numerals and then inner parts. Make sure that the chords move smoothly.

5. Check for parallels!

General part writing points:

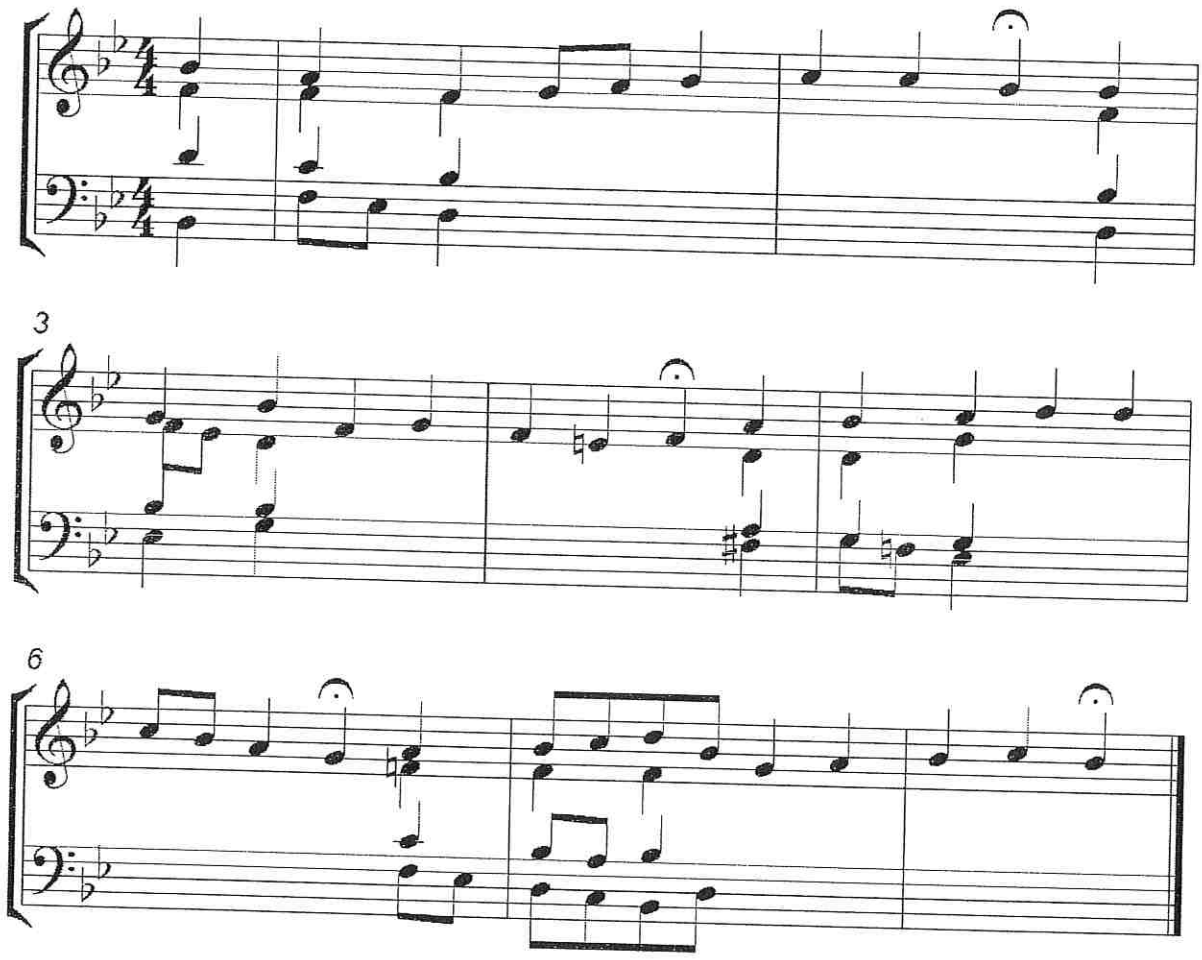
- Soprano parts tend to use conjunct movement. The widest leaps occur in the bass part.
- Inner parts should move as little as possible, staying on the same note, moving in conjunct motion or in small leaps
- Aim for contrary motion between the melody and bass
- Keep the upper parts fairly close together (certainly less than an octave between sop-alto and alto-tenor). However, there is frequently a large gap between tenor and bass

Edexcel sample assessment material 2009



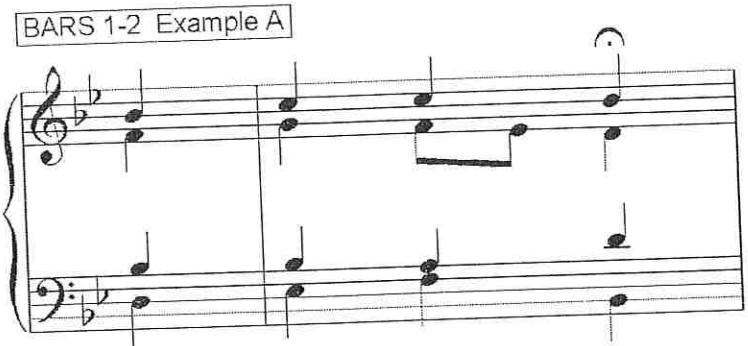
- Very similar to old Edexcel AS paper (but much less of it!). Old Edexcel AS papers can be used for practice.

AS Bach 2006 (adapted)



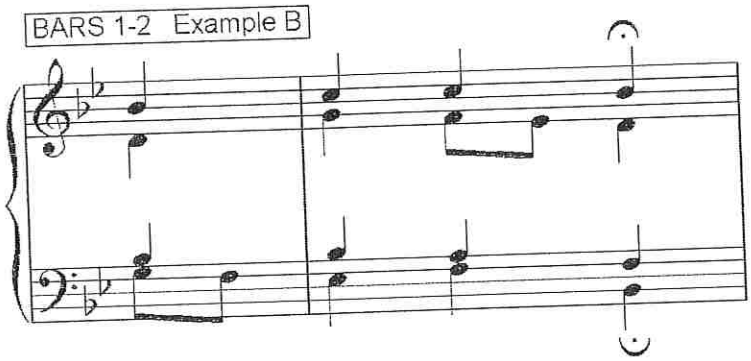
AS Bach 2006: Chorale Cadences

BARS 1-2 Example A

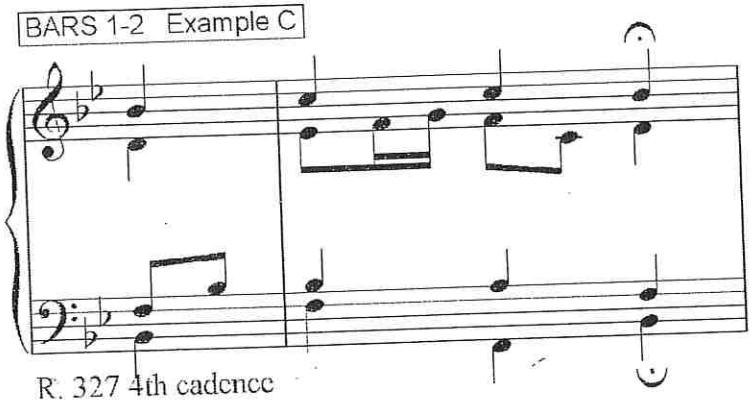


R. 257 last cadence

BARS 1-2 Example B

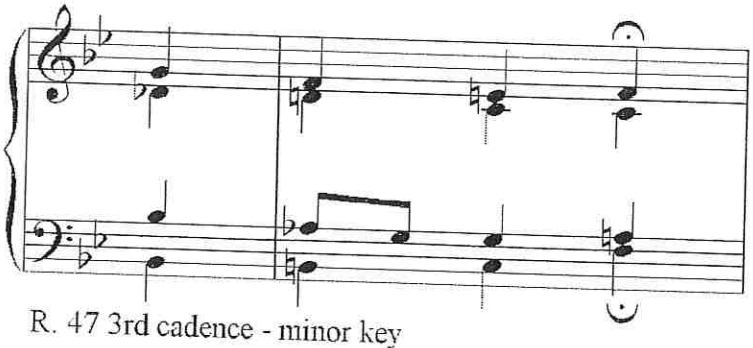


BARS 1-2 Example C



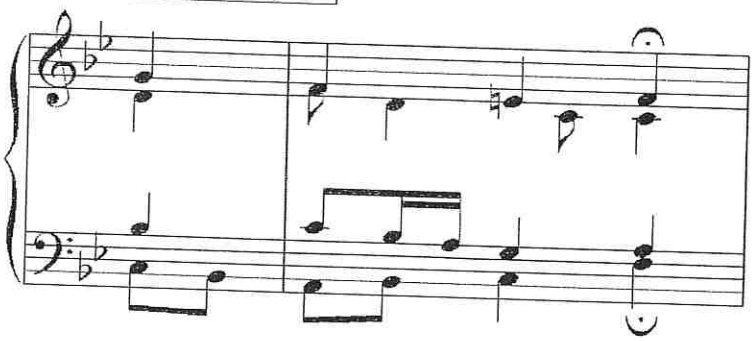
R. 327 4th cadence

BARS 3-4 Example A

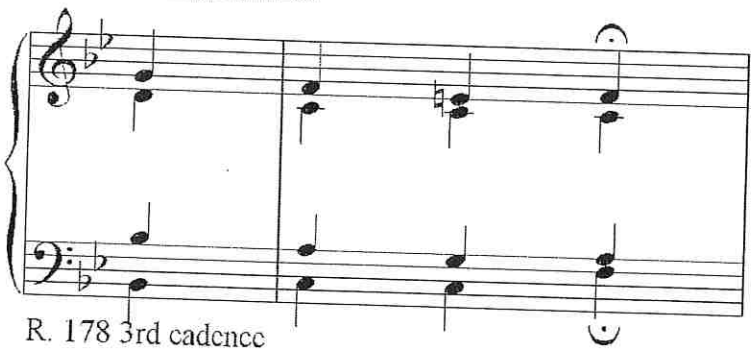


R. 47 3rd cadence - minor key

BARS 3-4 Example B

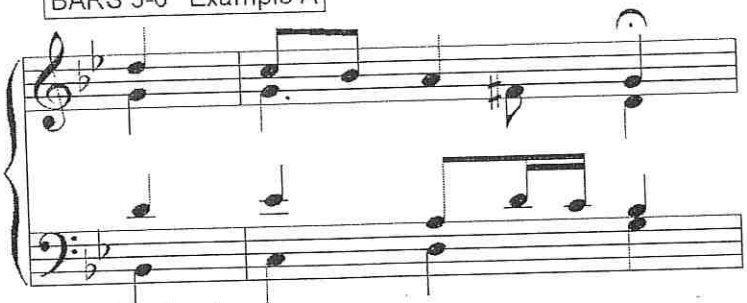


BARS 3-4 Example C



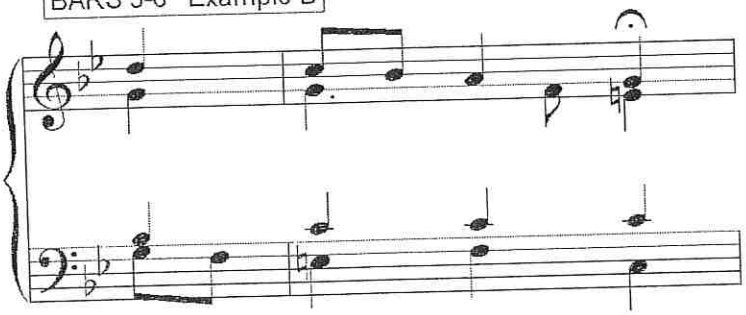
R. 178 3rd cadence

BARS 5-6 Example A



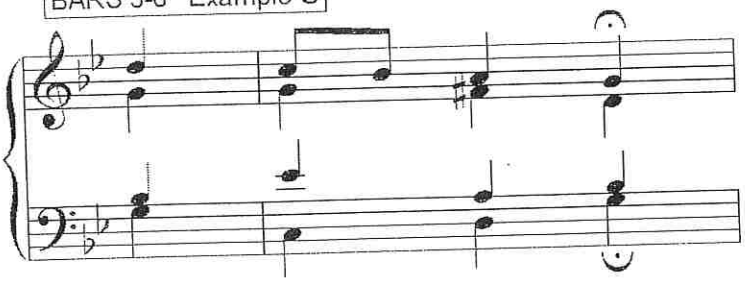
R. 224 2nd cadence

BARS 5-6 Example B

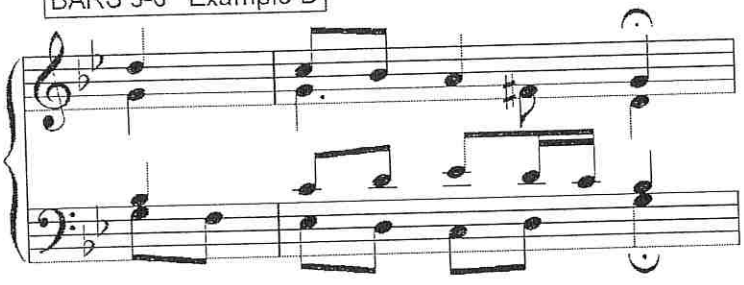


R. 307 3rd cadence

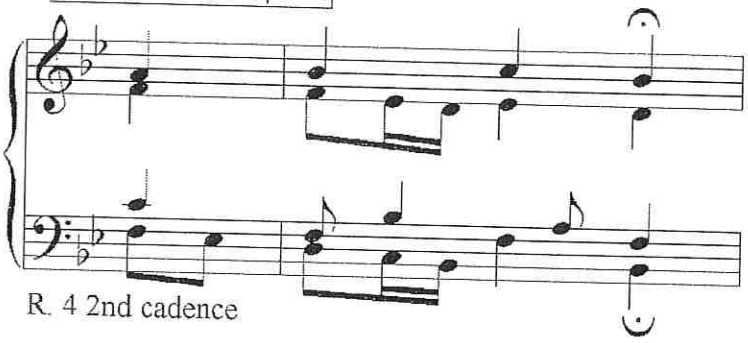
BARS 5-6 Example C



BARS 5-6 Example D

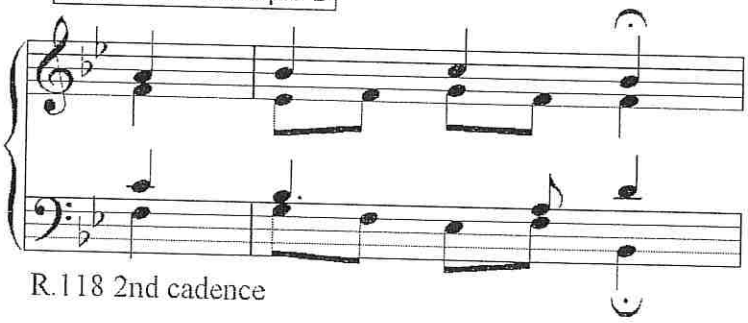


BARS 7-8 Example A



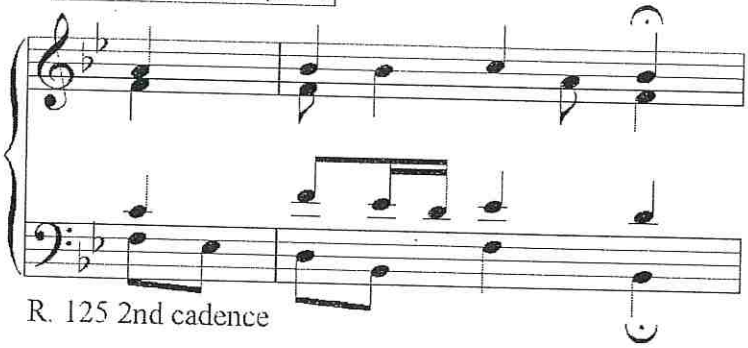
R. 4 2nd cadence

BARS 7-8 Example B



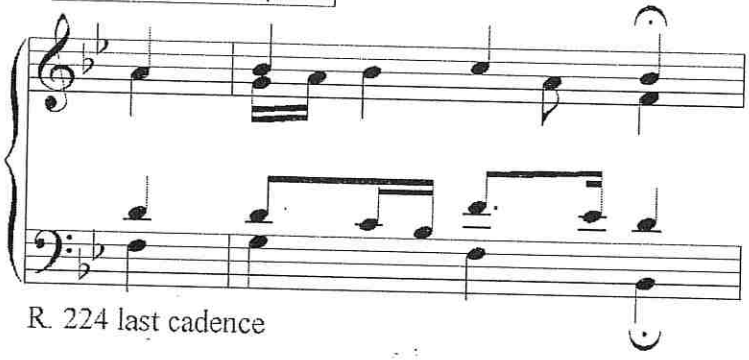
R.118 2nd cadence

BARS 7-8 Example C



R. 125 2nd cadence

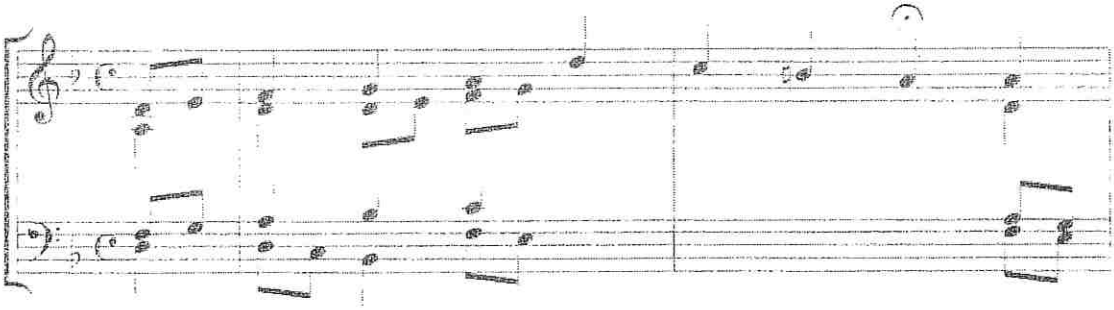
BARS 7-8 Example D

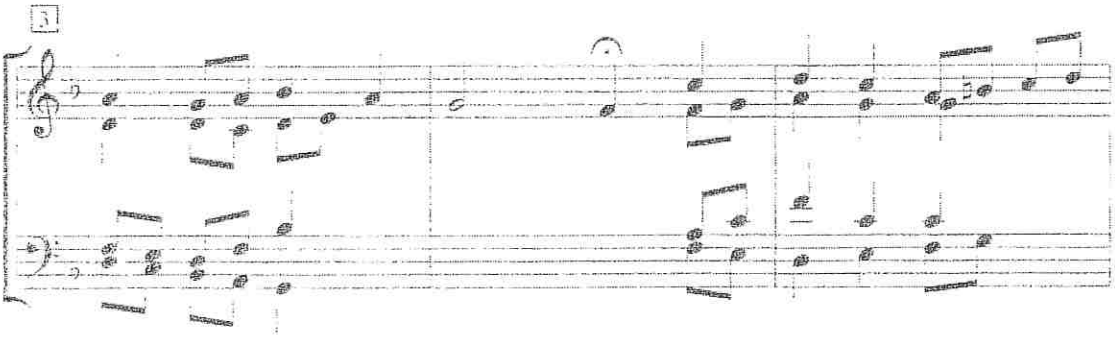


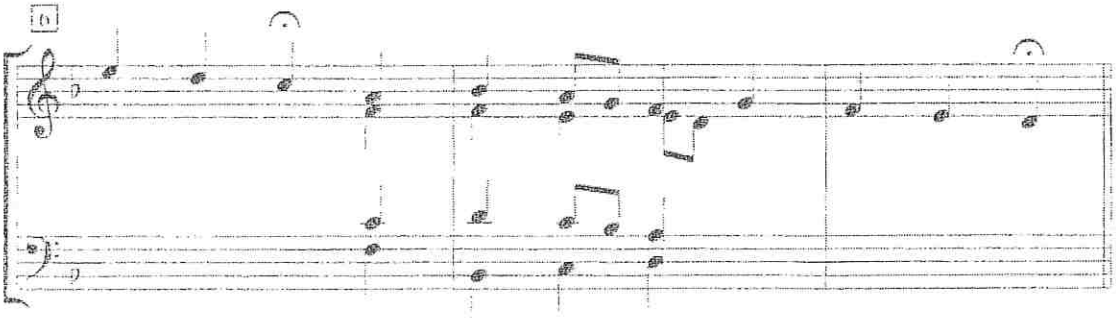
R. 224 last cadence

Topic B (i) Chords and Cadences – Bach Chorale

Add alto, tenor and bass parts to complete the cadences of the following in an appropriate style.







BACH to A2

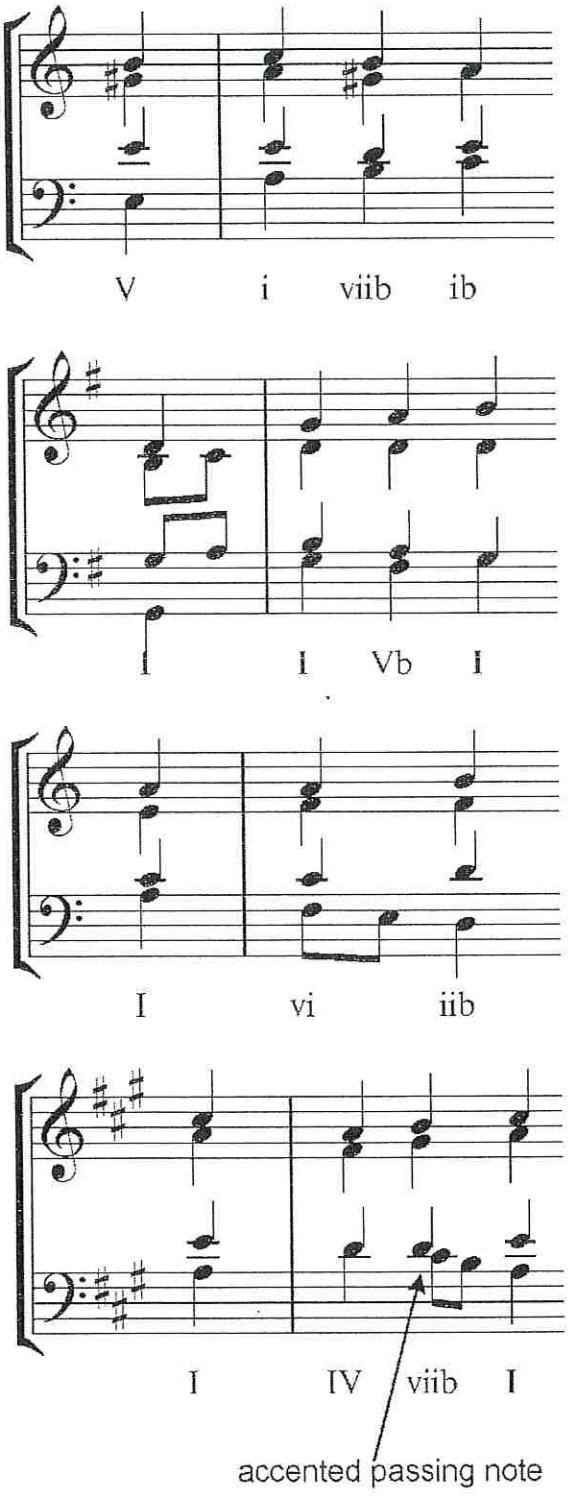
Revision of techniques for writing complete Bach chorales

Remember:

- Chords I/Ib and V/Vb are the most frequently used chords in Bach chorales (then vi, viib, IV/IVb)
- Chord iii should only be used in close proximity to chord vi
- Progressions in which the roots fall a fifth are particularly strong (e.g. vi - ii^7b)
- Use a mixture of root position and first inversion chords
- Start modulations earlier in the phrase rather than just at cadences
- Chorales often begin with an anacrusis or up-beat. Sometimes this will suggest V-I, or I - (with an upward octave leap)
- Look for opportunities for suspensions (stepwise movement in alto/tenor parts)
- The following progressions are common (and very useful)

Completing the opening of a chorale phrase

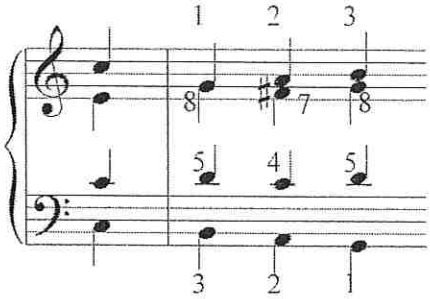
Many chorale phrases begin with an anacrusis or up-beat



Passing viib

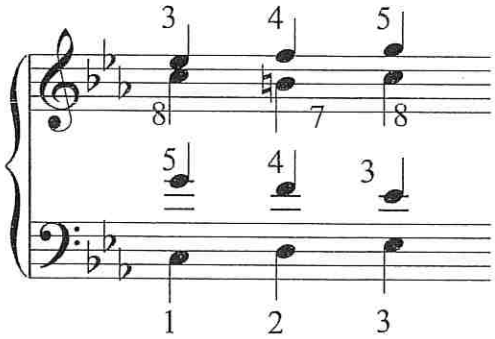
123,321,878,545

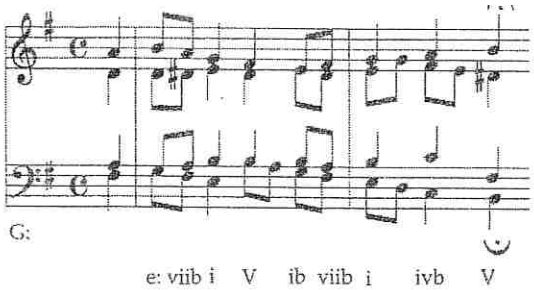
For use in the middle of phrases



345,543,123,878

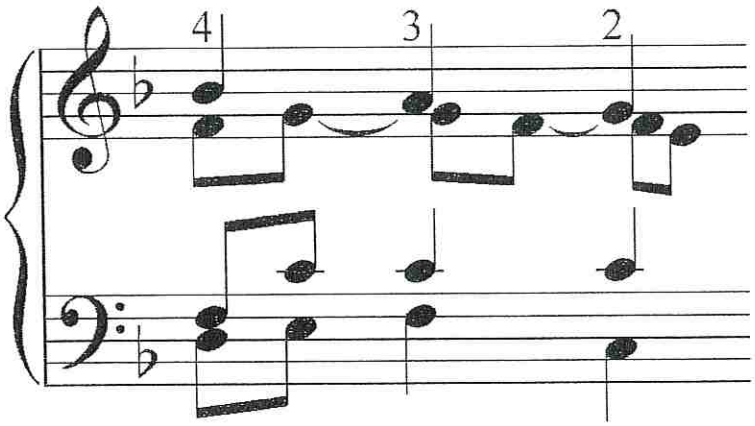
For use in the middle of phrases





This progression works as a unit in its own right in any key e.g. it can be used to create a passing modulation to add harmonic colour

Another useful little item...



Managing Modulations in Bach Chorales

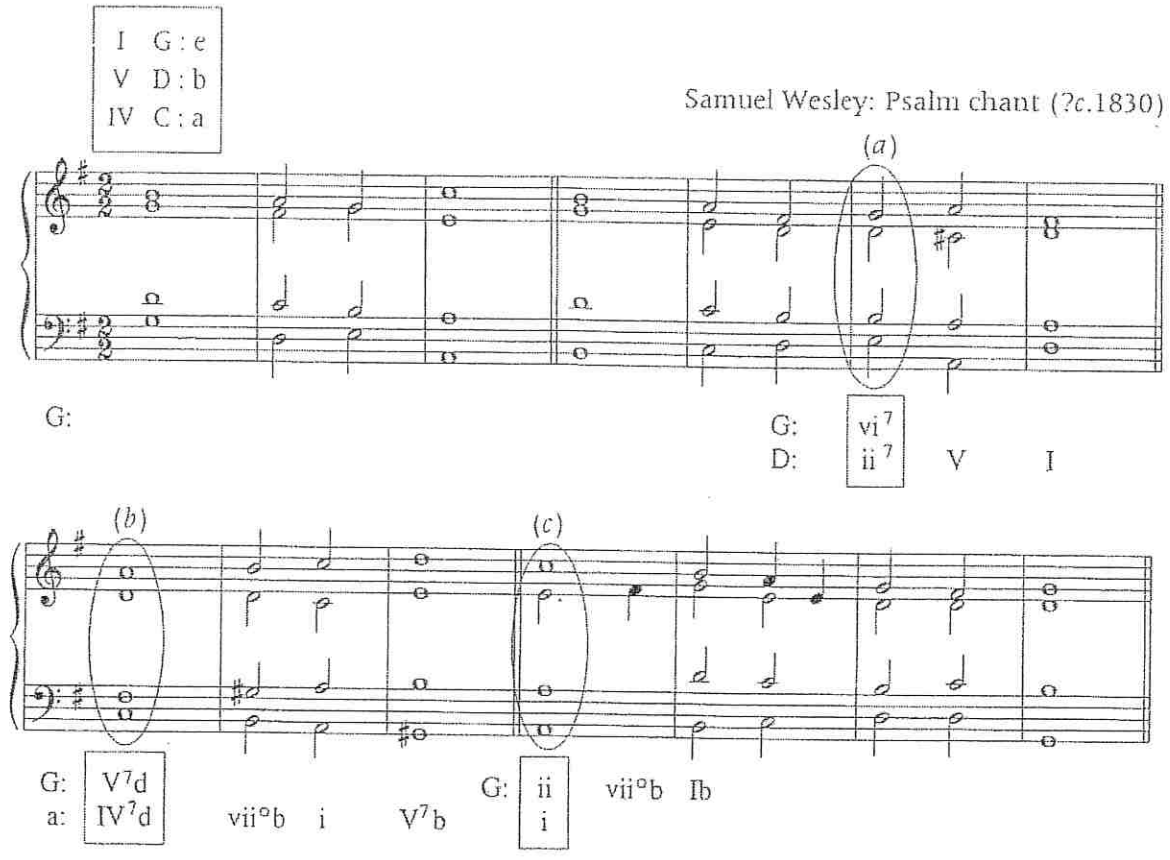
- Work out the **related keys** that the chorale may modulate to
- Look out for leading notes that don't rise – this usually indicates that a modulation has taken place
- Look out for accidentals – a new sharp (in a 'sharp' key) or a new natural (in a 'flat' key) is very likely to be a **new leading note**
- A new natural (in a 'sharp' key) or a new flat (in a flat key) is most likely to be the **dominant 7th note** of the new key

USING PIVOT CHORDS

- A smooth change of key can be made using a **pivot chord**.
- A **pivot chord** is a chord that belongs both to the key you are coming from and the key you are going to
- A **pivot chord** is normally followed by a chord of the **dominant group** in the new key.

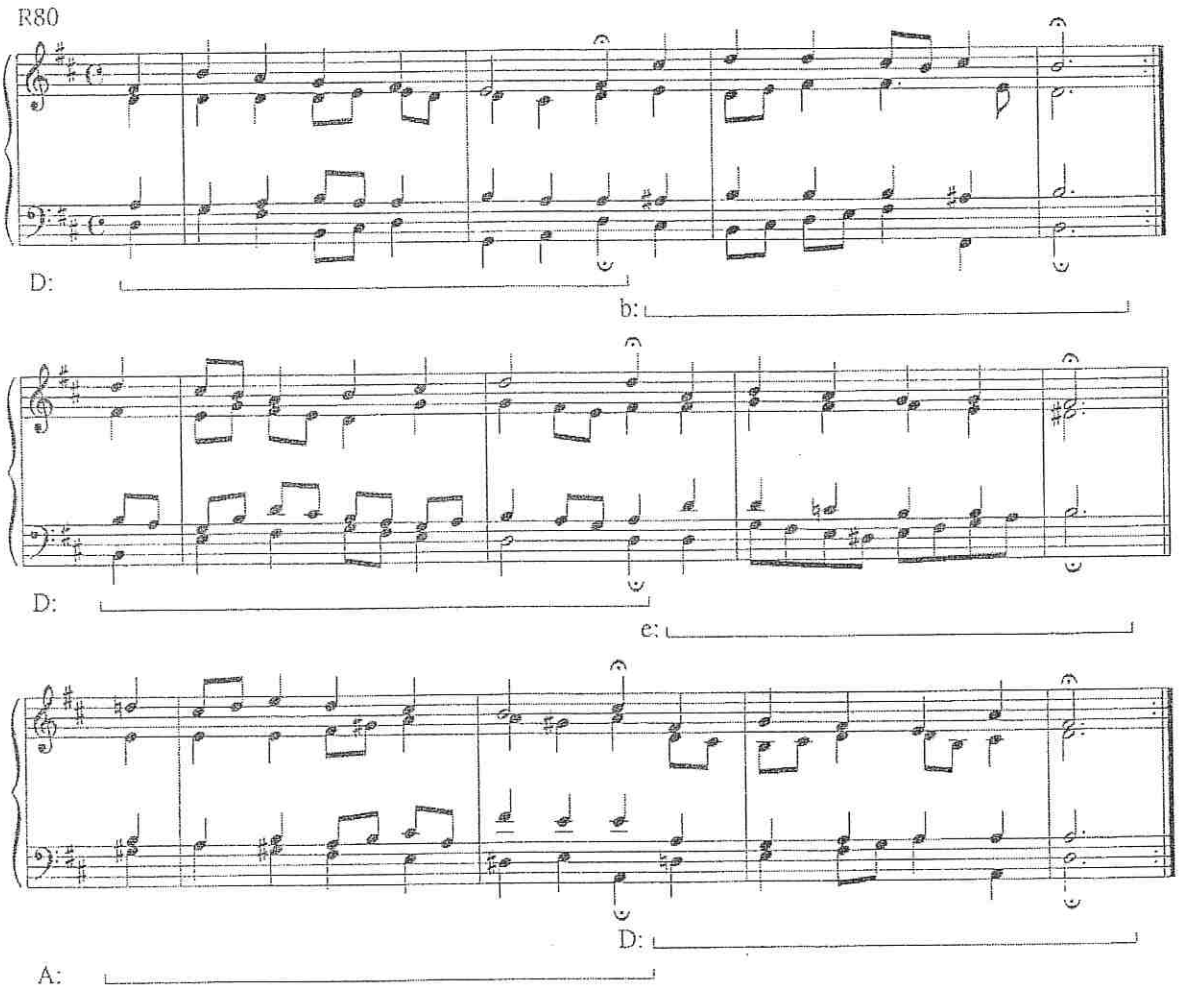
Some useful pivot chords

Some useful pivot chords	
From major keys: • to the dominant: vi = ii • to the subdominant ii = vi • to the relative minor ii = iv	From minor keys: • to the dominant minor: i = iv • to the subdominant minor iv = i • to the relative major iv = ii

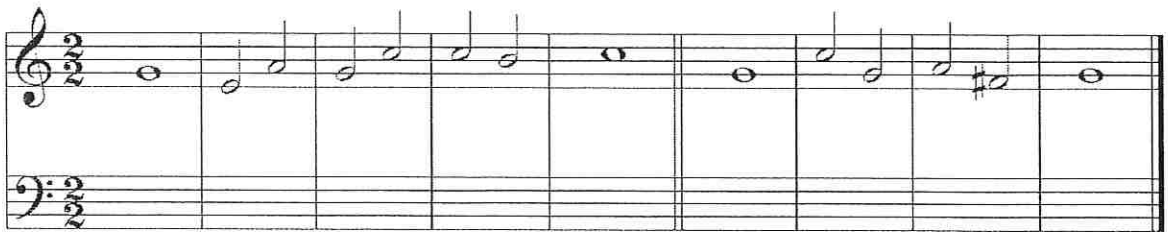


ABRUPT MODUALTIONS

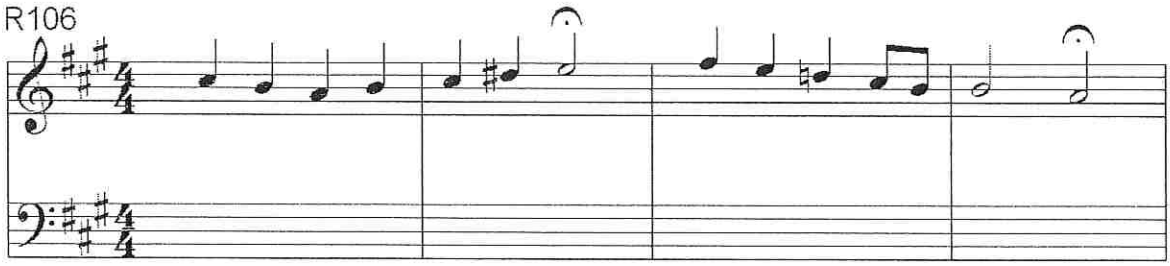
- In an abrupt modulation a chord of the destination key's dominant group appears with no intervening pivot chord
- Abrupt modulations are frequently made by a note rising by semitone in the bass (which acts as a new leading note)

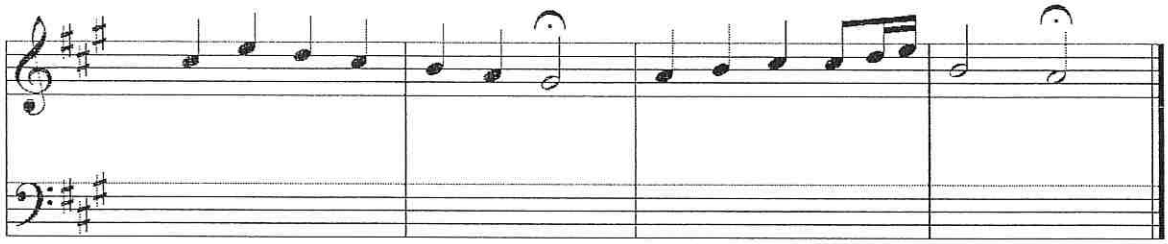


Modulations

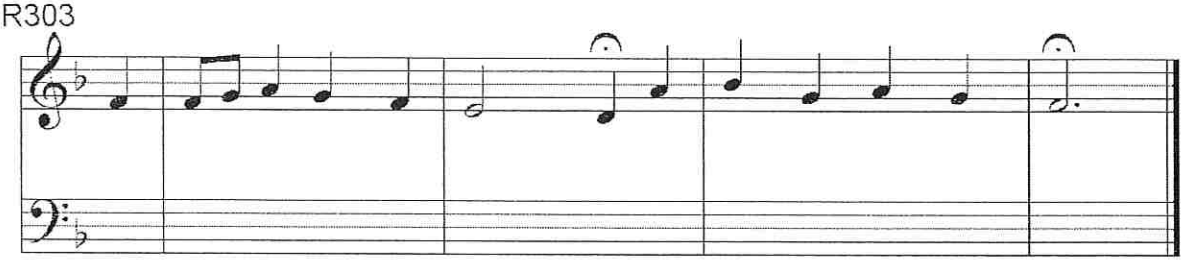


R106

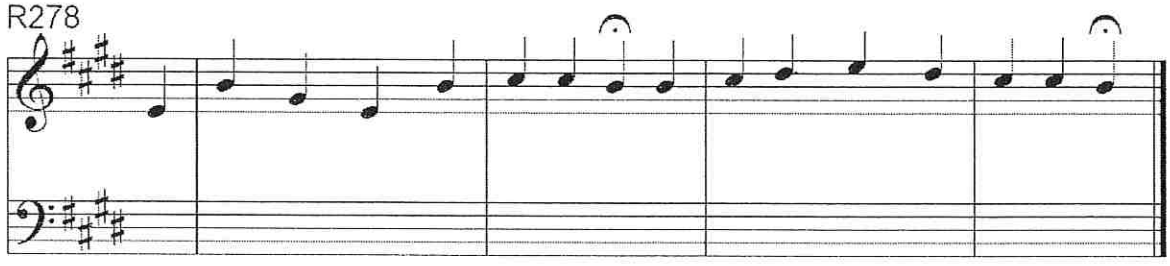




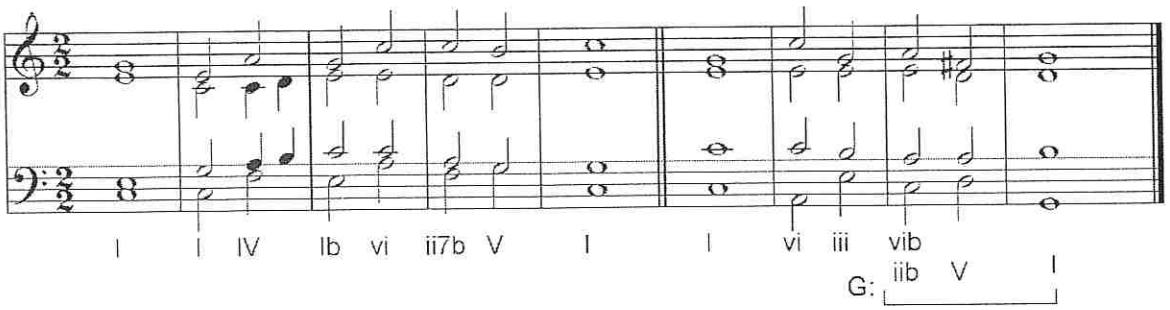
R303



R278



Modulations



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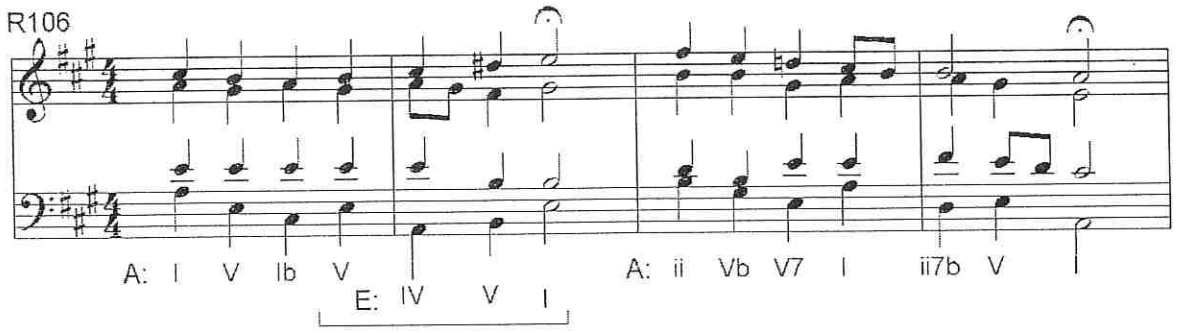

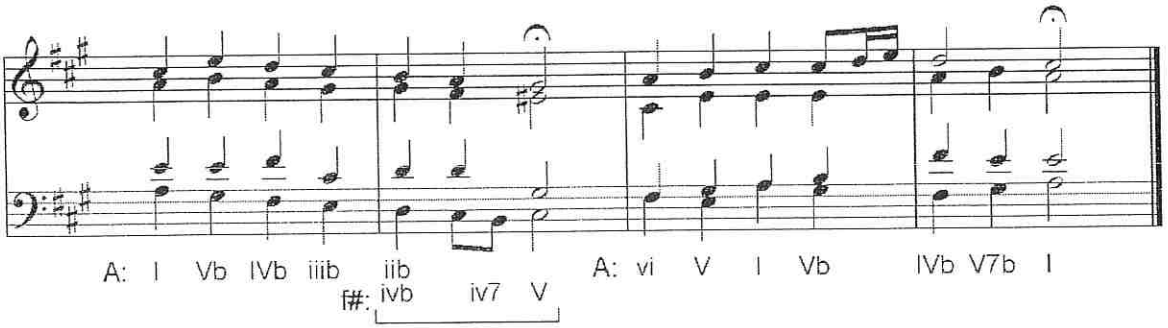

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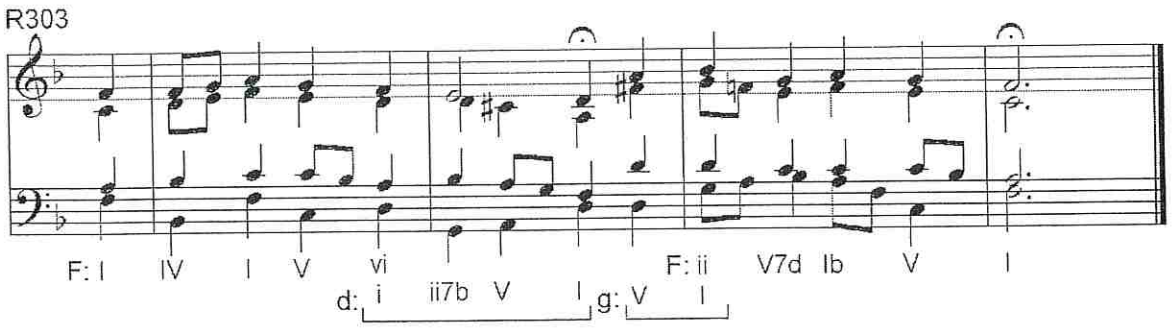

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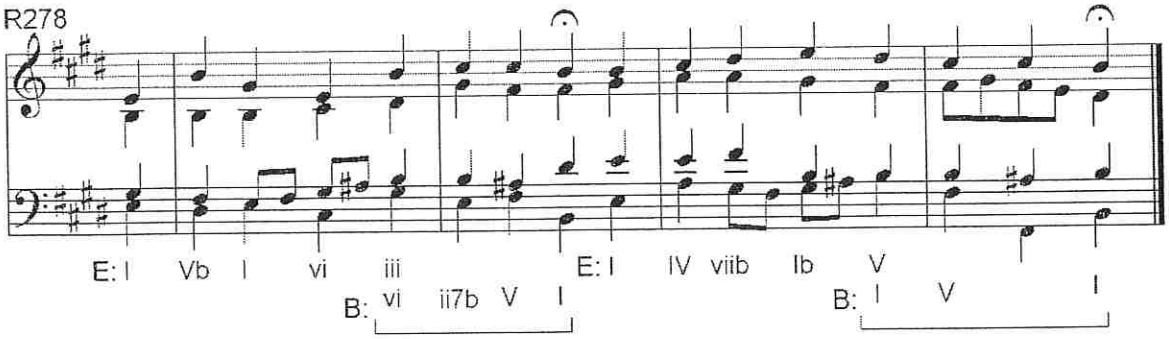

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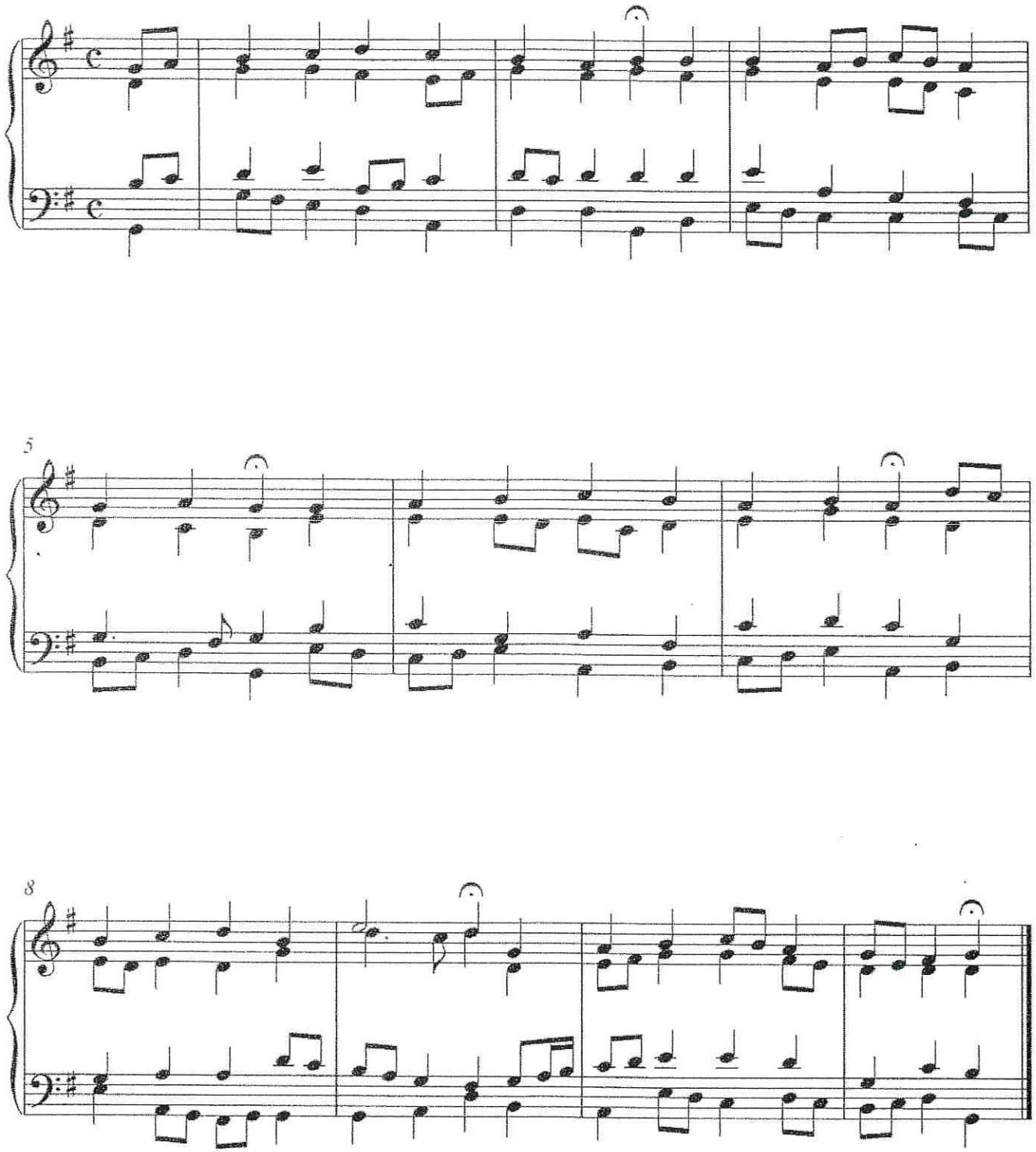
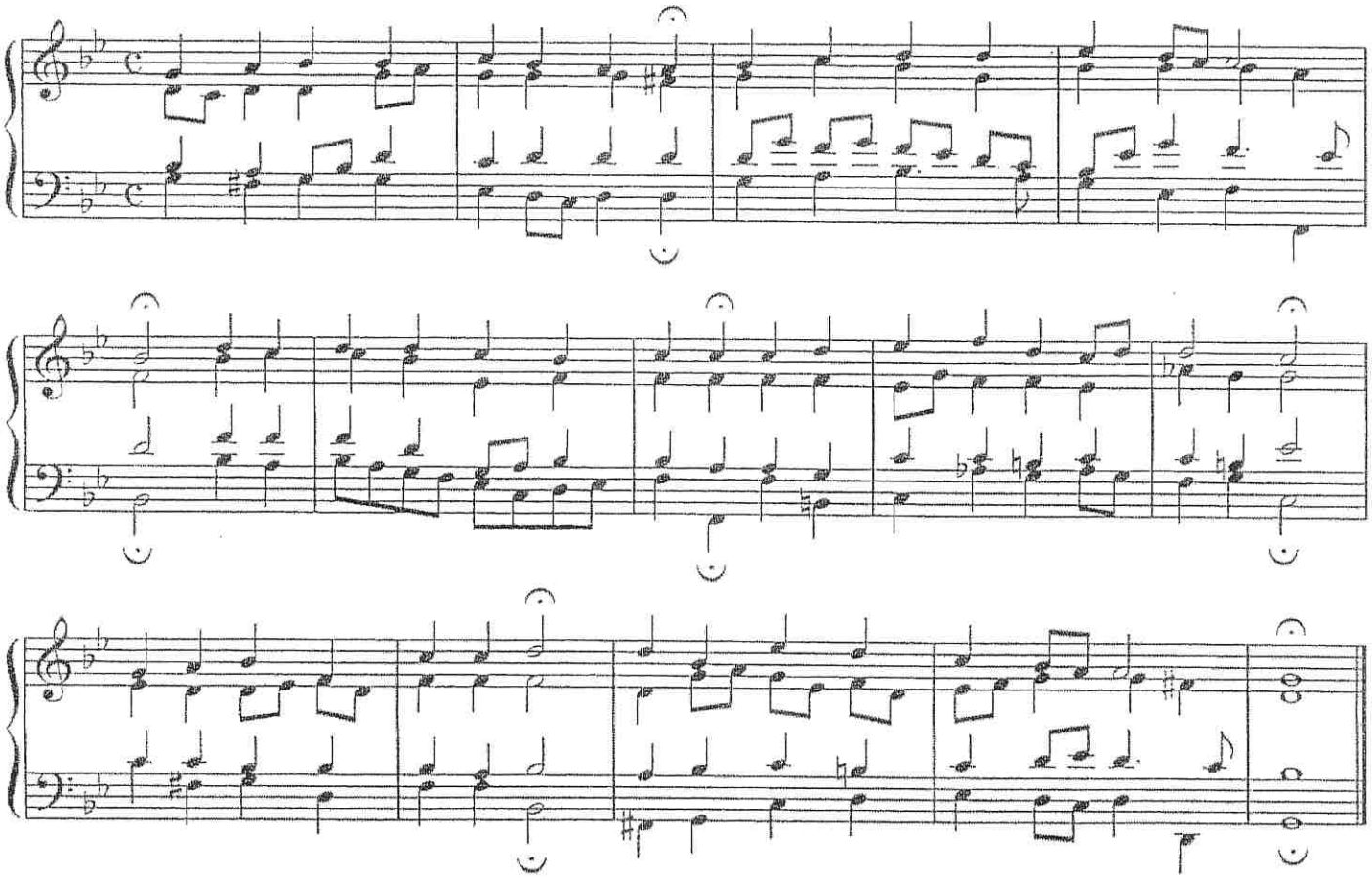


The following harmonization contains ten examples of incorrect consecutive or exposed octaves and fifths. Locate the errors and mark them clearly on the score. Then play through each pair of parts separately, listening carefully for the effects of the errors.



A Rough Guide to Bach Chorale Writing

- Sing the tune through in your head/play it on a keyboard. This will help you work out the keys and cadences.

- Work out the cadences and write in the roman numerals. Most chorale cadences are **perfect** - and the tonic note is often to be found under the pause. The second most common cadences are **imperfect**, and the 5th is often under the pause. *DON'T use interrupted/plagal cadences!!!*

  Look for opportunities to use **cadential formulae**

  II7b V(7) I (the leading note usually falls to the fifth in the pause chord)
  V (4-3) 7 I
  Ib-V(7)-I with a passing note in the bass = **321 in the soprano**

  At a cadence the tune often has a minim before the pause chord. This needs **TWO** chords (i.e. I then Ib) or a suspension to make it work.

- Choose all of the other chords, and write in the roman numerals. Look for standard shapes.

123 in soprano = 321 in bass, 878,545	Ib-viib-I
321 in soprano = 123 in bass, 878,545	I-viib-Ib
543 in soprano = 321 in bass, 878, 345	Ib-viib-I
345 in soprano = 123 in bass, 878, 543	I-viib-Ib

- Write in the bass part, making sure that it is an interesting **melodic** line.

- Now add inner parts, keeping the **tenor part high**

- Check your work for consecutives.

Style points:

- First inversion chords help to create **smooth part writing**.

- **Doubling** - observe the following...

  In major root position chords double the root where possible. If not possible double the fifth. Avoid doubling the third, EXCEPT in chord **vi** where you MUST double it! **NEVER double the 3rd in chord V as it is the leading note!**

  In first inversion chords, double the root, or the fifth but not the bass note if you can avoid it. You can double the third provided that there is strong contrary motion to justify it.

  In chord **viib** DO NOT double the root - you should double the third. The number combinations, if followed correctly, will make sure that the right notes are doubled.

- **Avoid second inversions** - the ONLY one you may need to use is Ic-V-I. Double the bass not of Ic and make sure the other parts move 6-5 and 4-3.

- **Dissonances** need to be treated carefully. A suspension should be prepared, suspended, and resolved

- Bach often uses **the 7th in V7 as a passing note** rather than sounding it on the beat.

- Use lots of **unaccented passing notes** between notes a 3rd apart, but avoid accented passing notes unless you are sure that they are correct.

- Make sure that the **harmonies change** over a bar line!!!

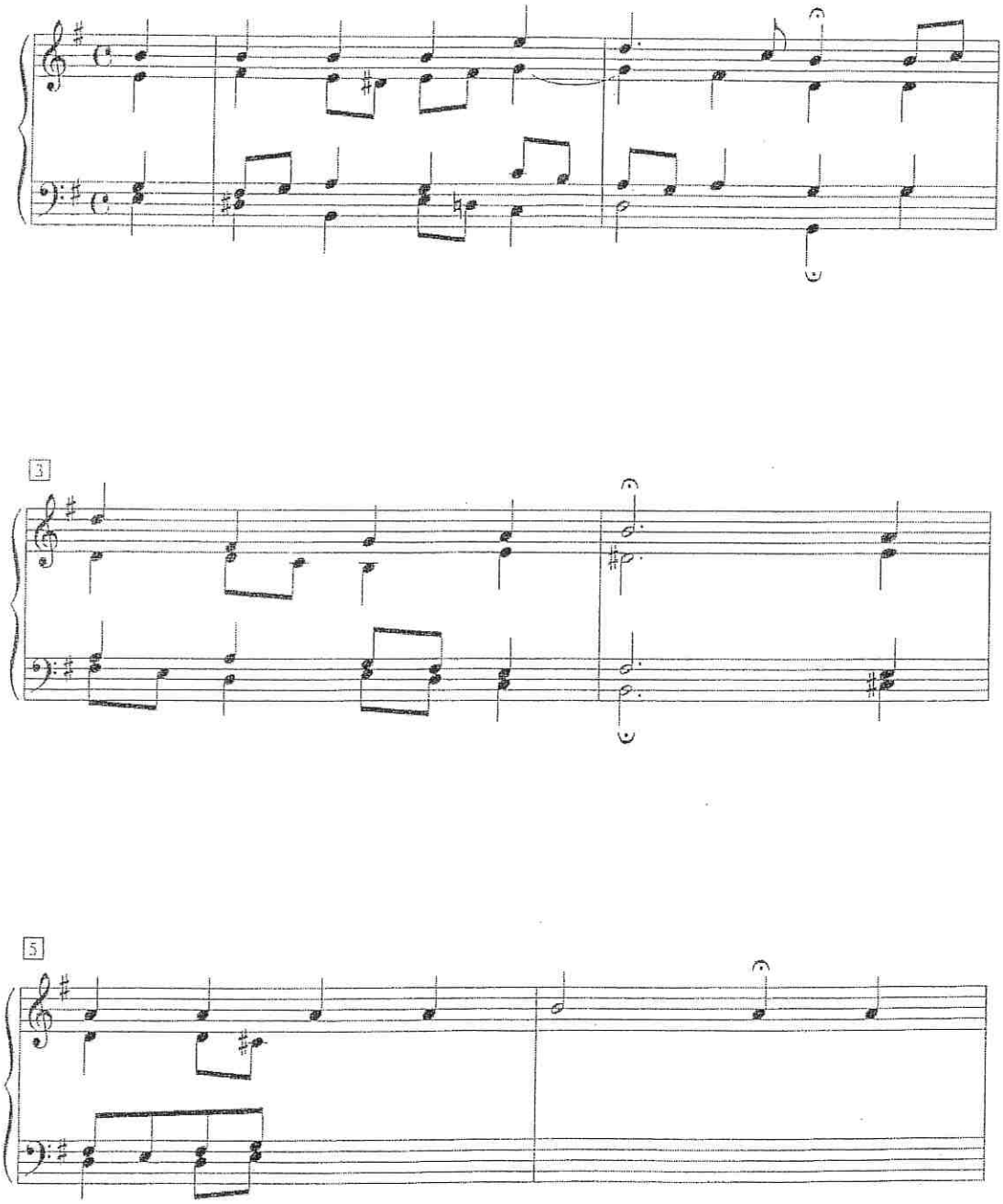
- **Part writing** - Keep the alto within an octave of the soprano and within a sixth of the tenor. The only large gaps should be between the tenor and bass.

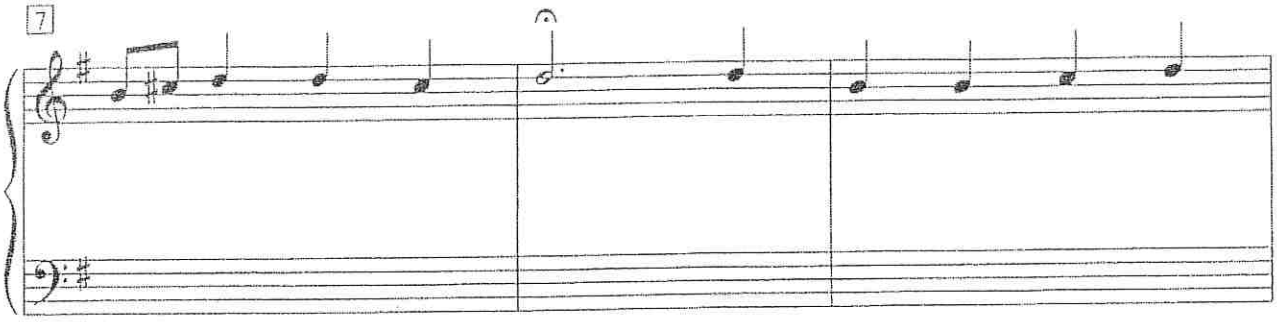
- **Don't forget your anacrustic openings!**

1. Complete the alto, tenor and bass parts of the following chorale in the manner of J. S. Bach.

[50 marks]

Keinen hat Gott verlassen

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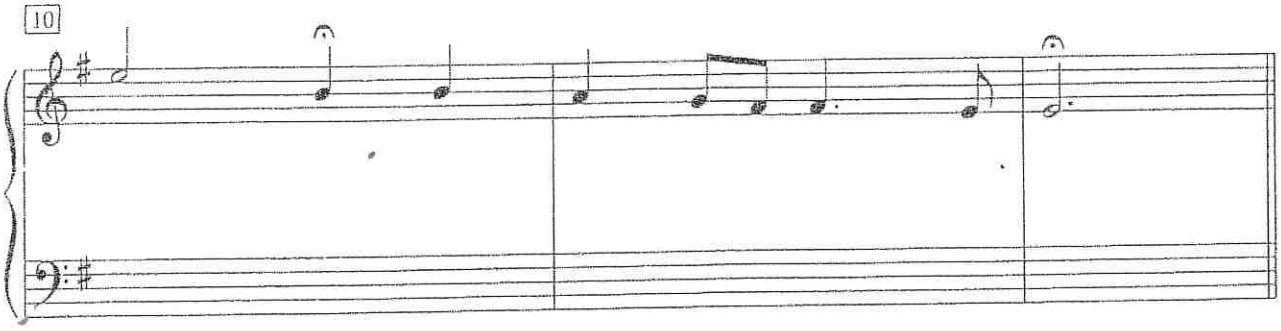
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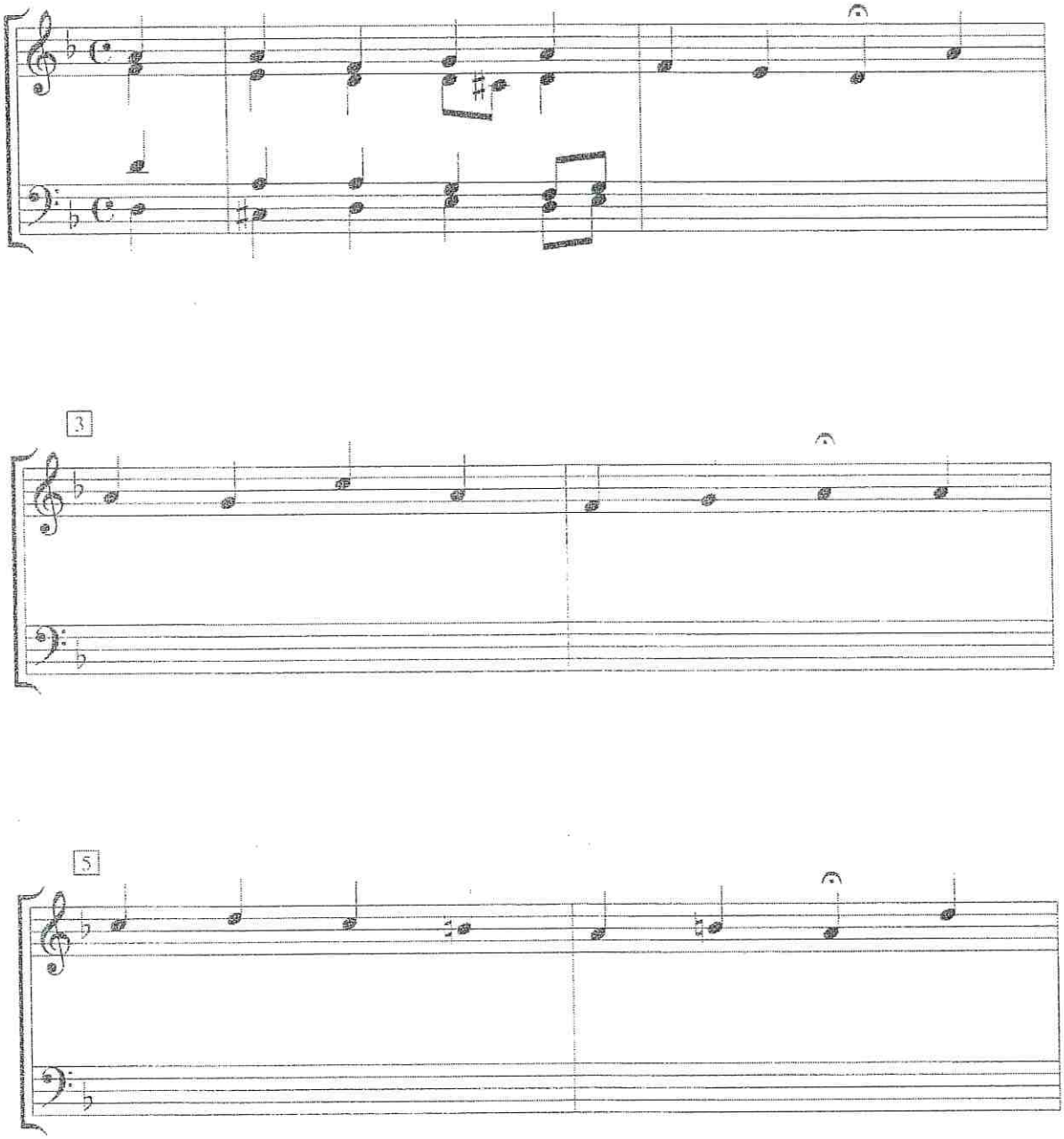
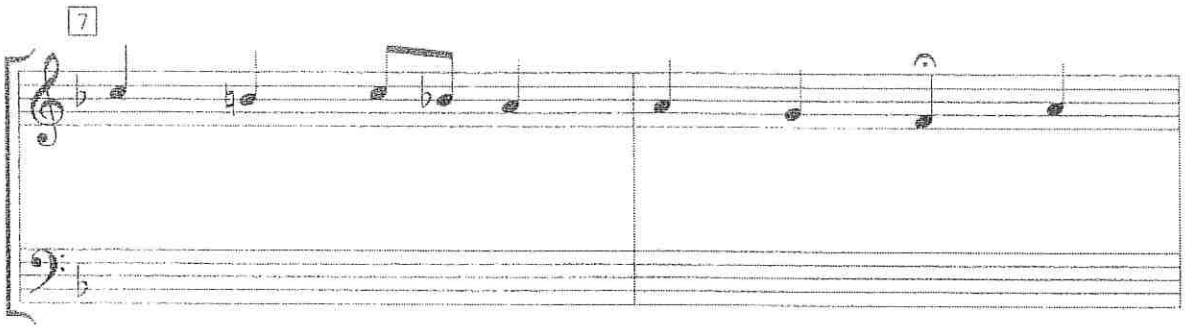
129 Keinen hat Gott verlassen

BWV 369

Topic B (i) Chords and Cadences – Bach Chorale

Add alto, tenor and bass parts to complete the following in an appropriate style.

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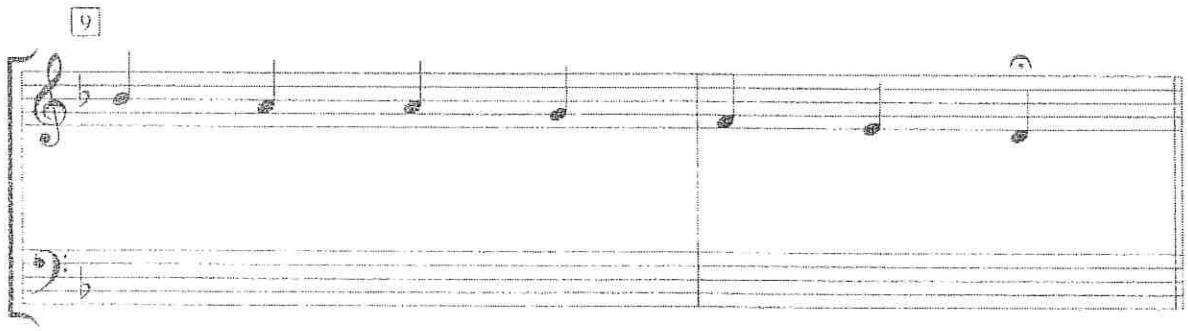
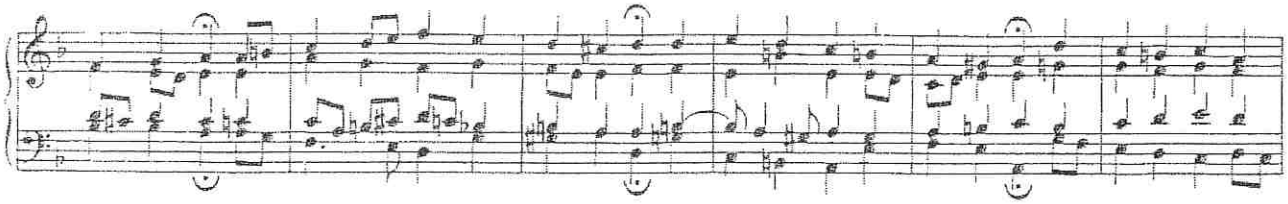
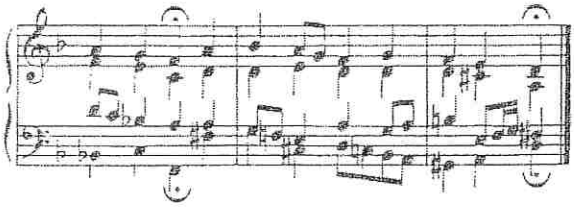

9

Vater unser im Himmelreich

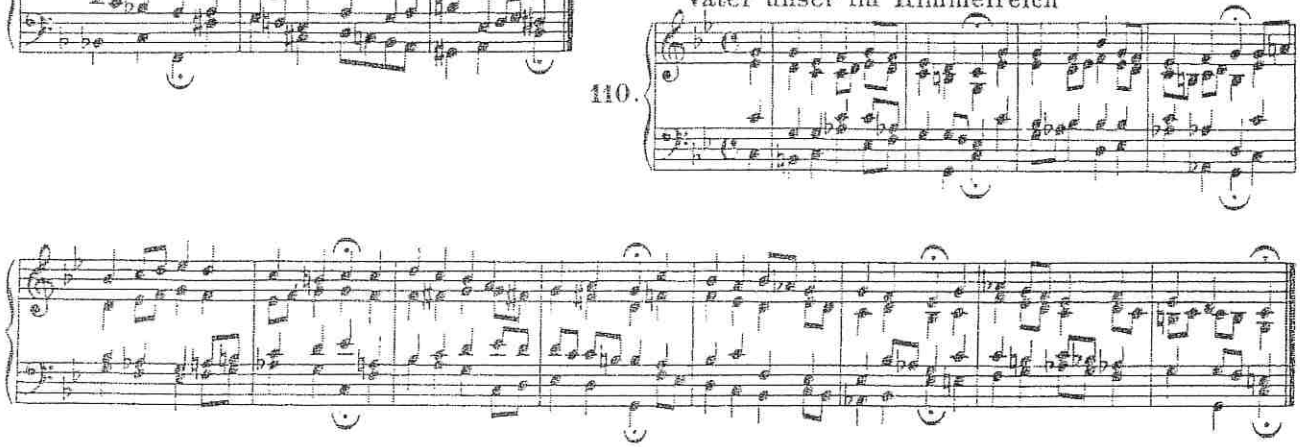
47.





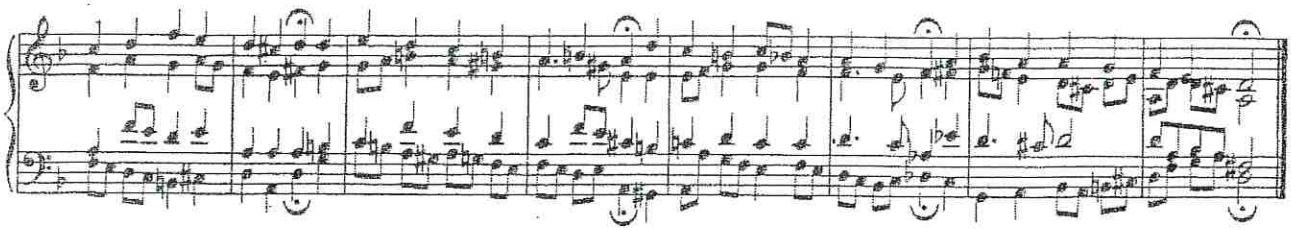
Vater unser im Himmelreich

110.



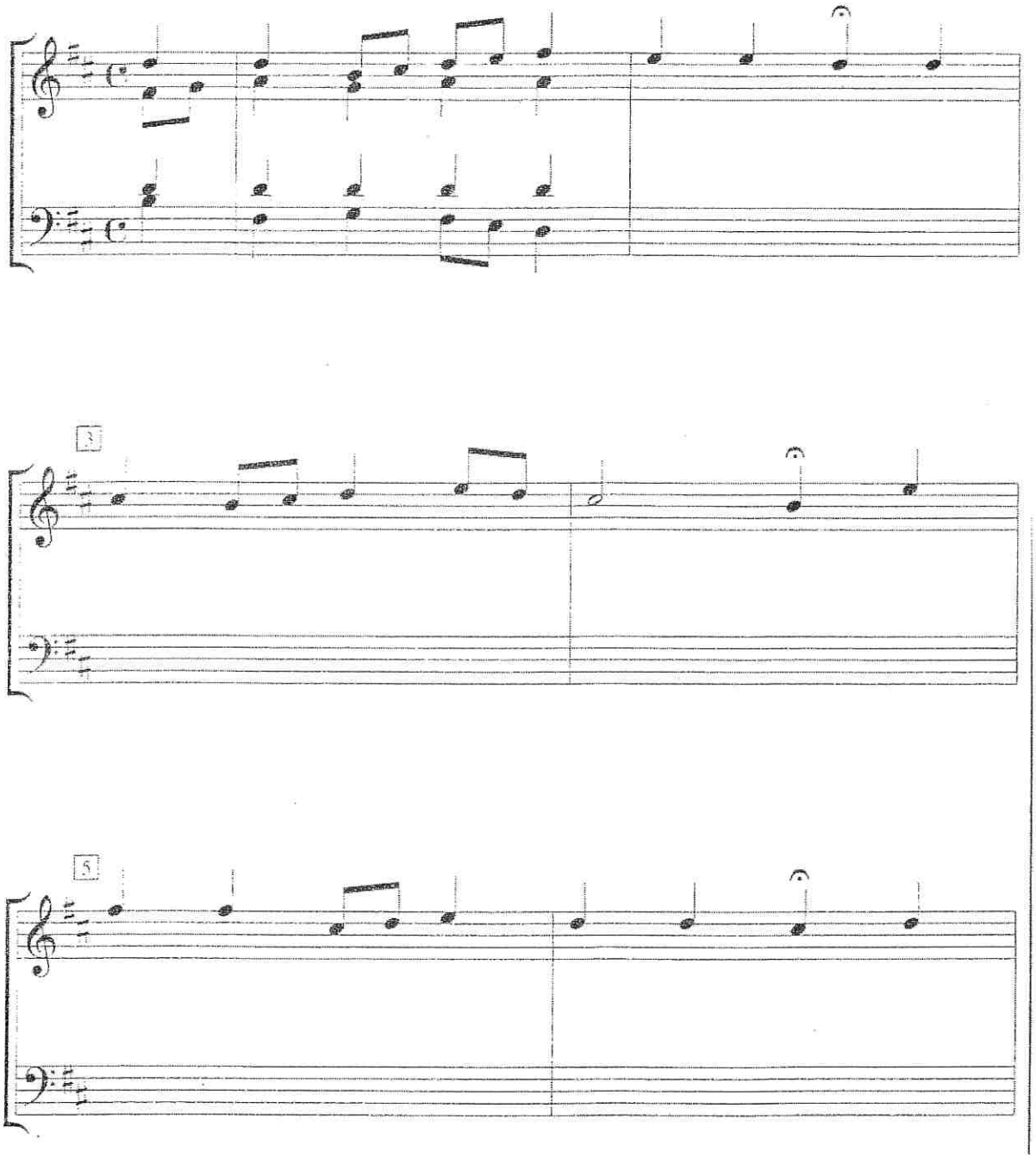
Vater unser im Himmelreich

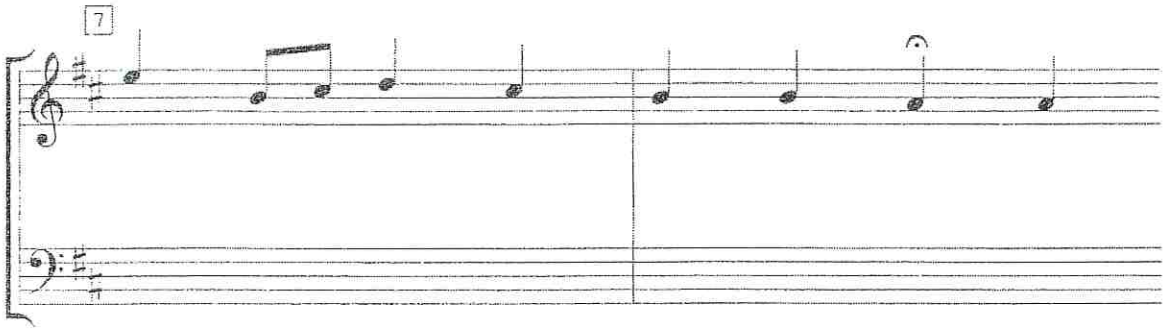
267.



Topic B (i) Chords and Cadences – Bach Chorale

Add alto, tenor and bass parts to complete the following in an appropriate style.

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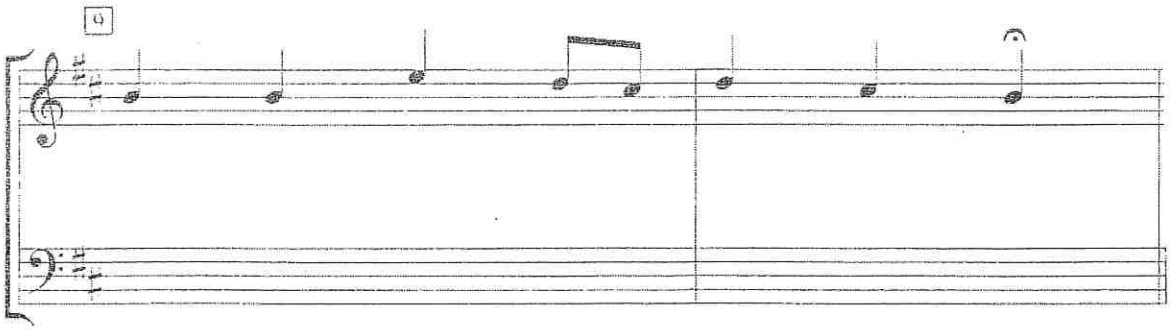
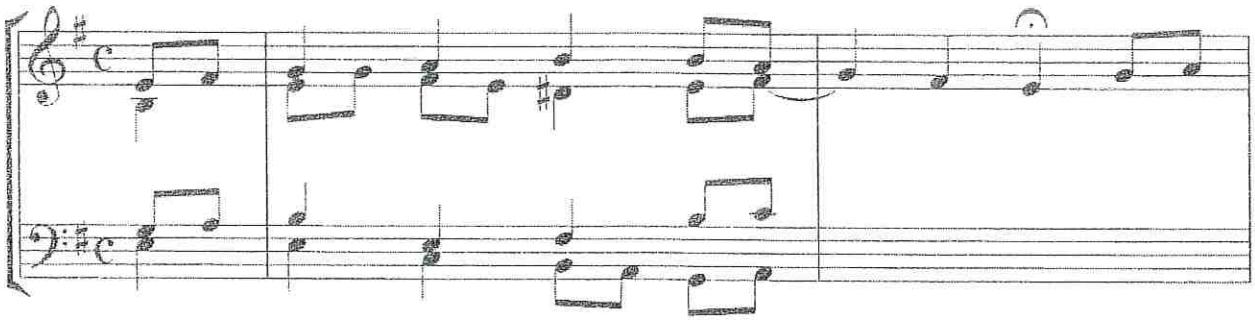

8

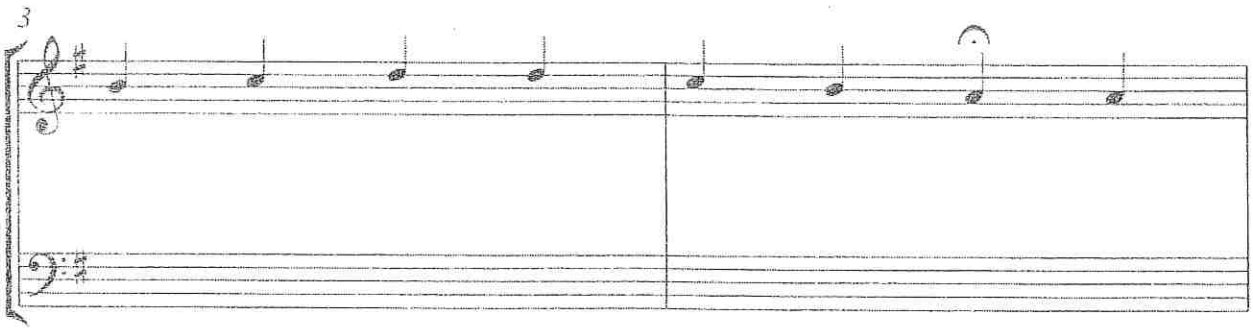
336.

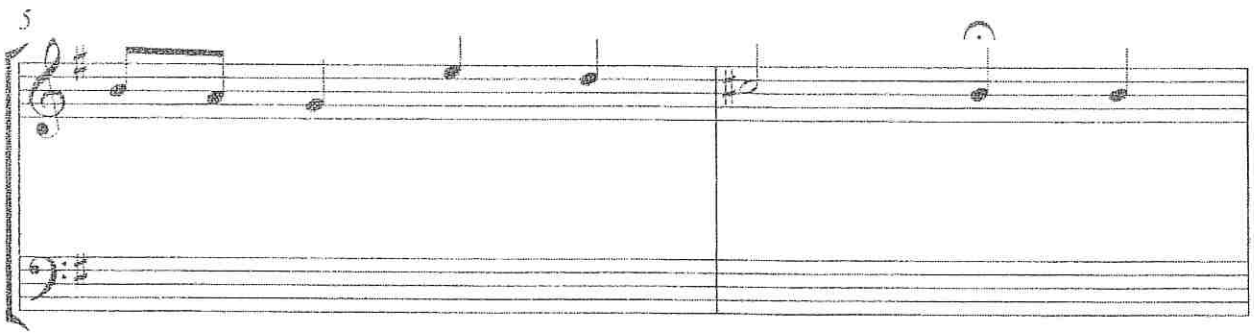
Wo Gott der Herr nicht bei uns hält

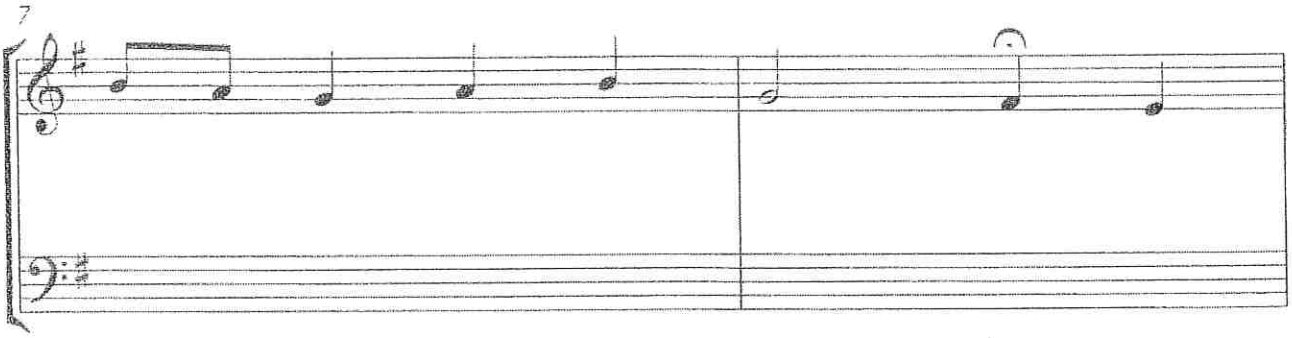
2010

Add alto, tenor and bass parts to complete the following in the style of J. S. Bach.





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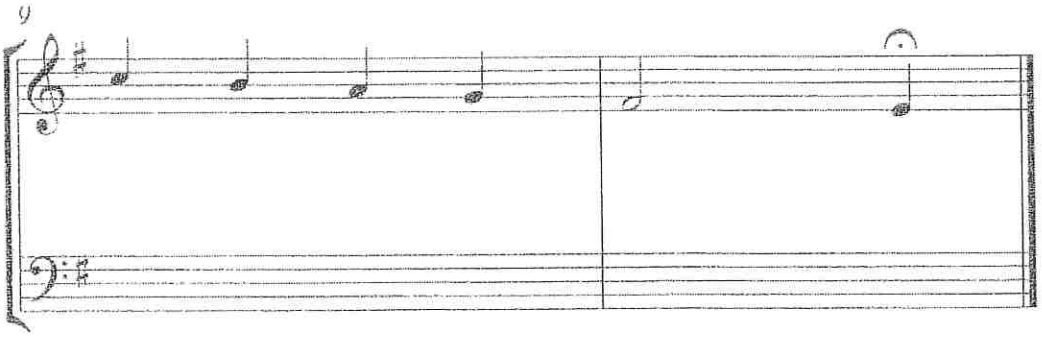
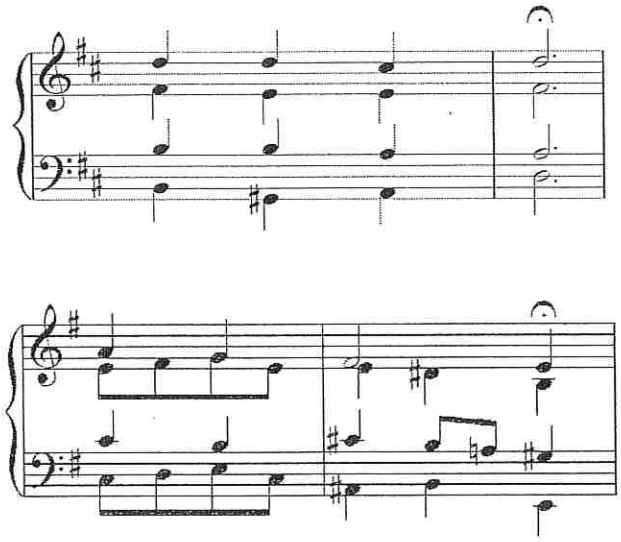

9

Using chromatic chords effectively

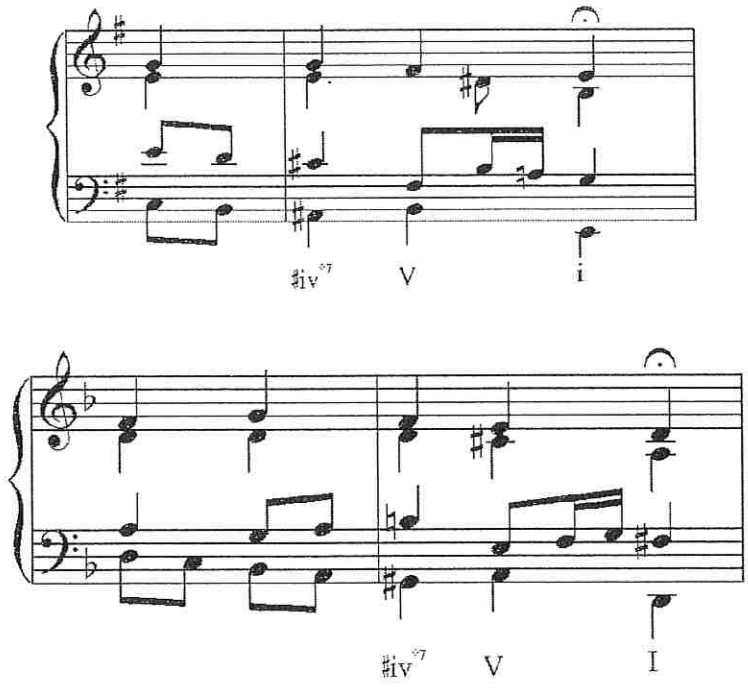
Supertonic chord

The most common chromatic chord is the supertonic chromatic seventh chord



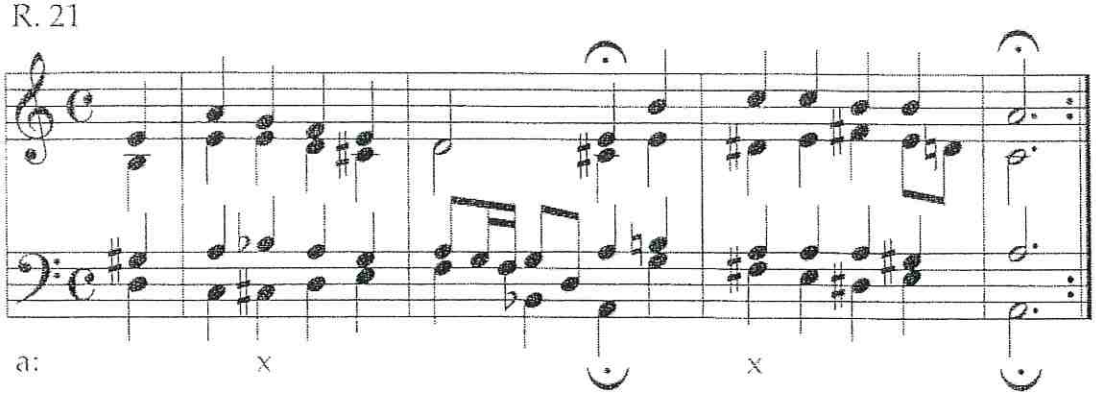
Diminished 7th

The diminished 7th may appear before V at a cadence (#iv^{d7}) as an altered version of iv^{7}

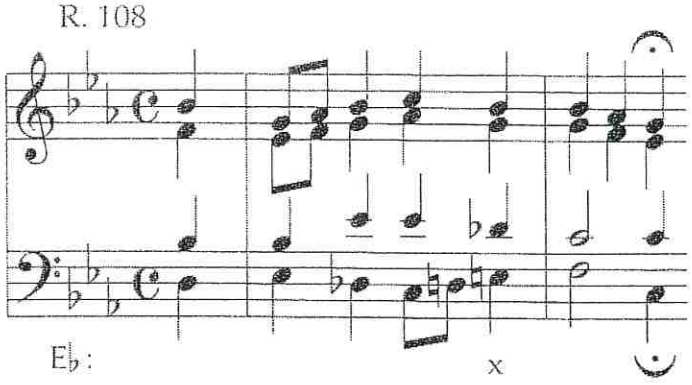


The diminished 7th may be used as a substitute for V^7b in a minor key

R. 21

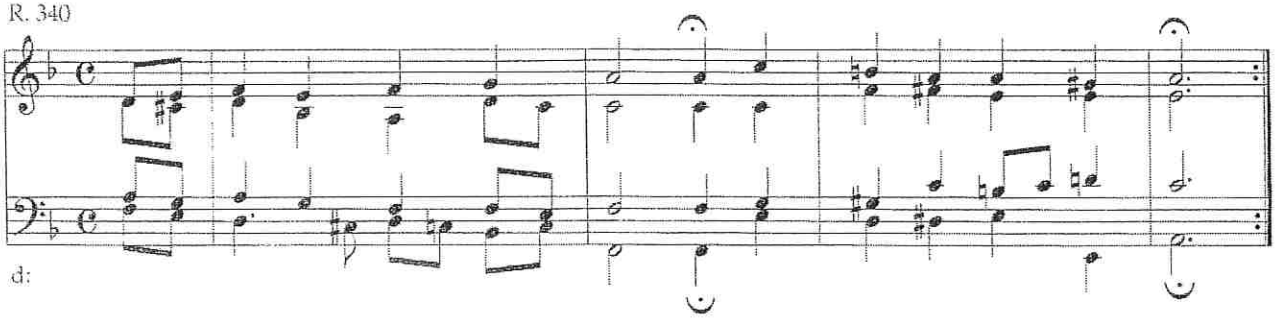


R. 108



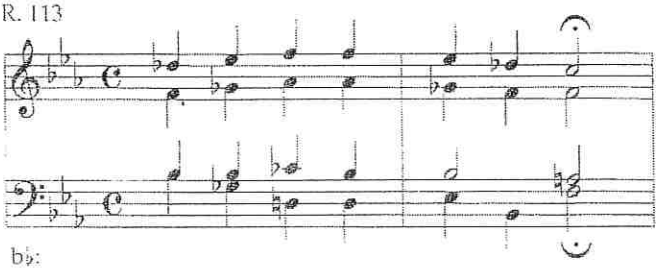
Identify the diminished 7ths in the following examples:

R. 340



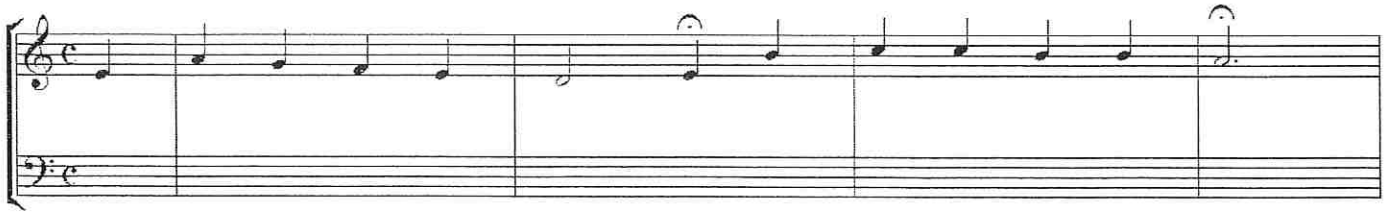
d:

R. 113

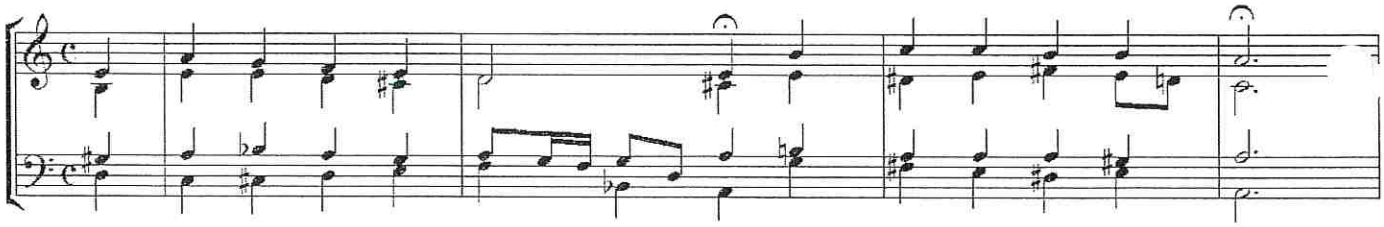


b♭:

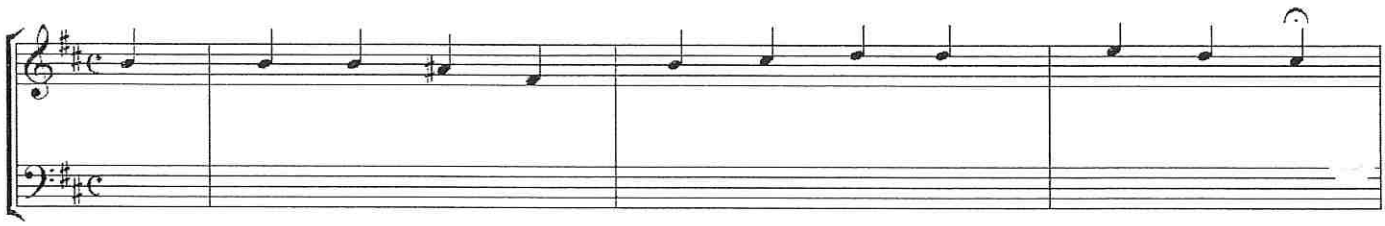
Harmonise the following:



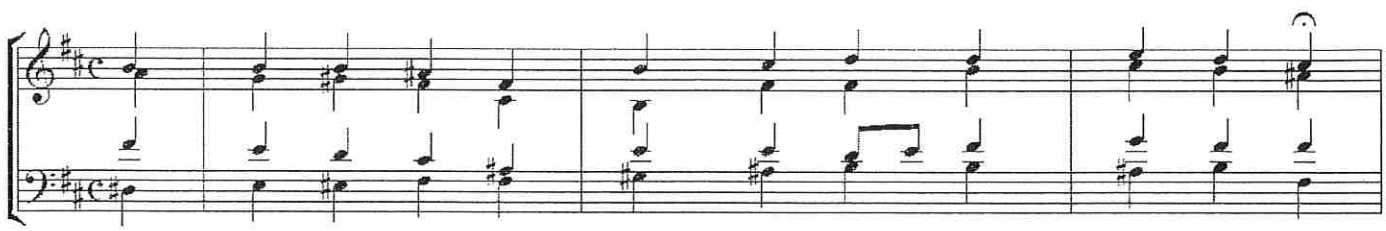
Bach's harmonisation R. 21



Harmonise the following:

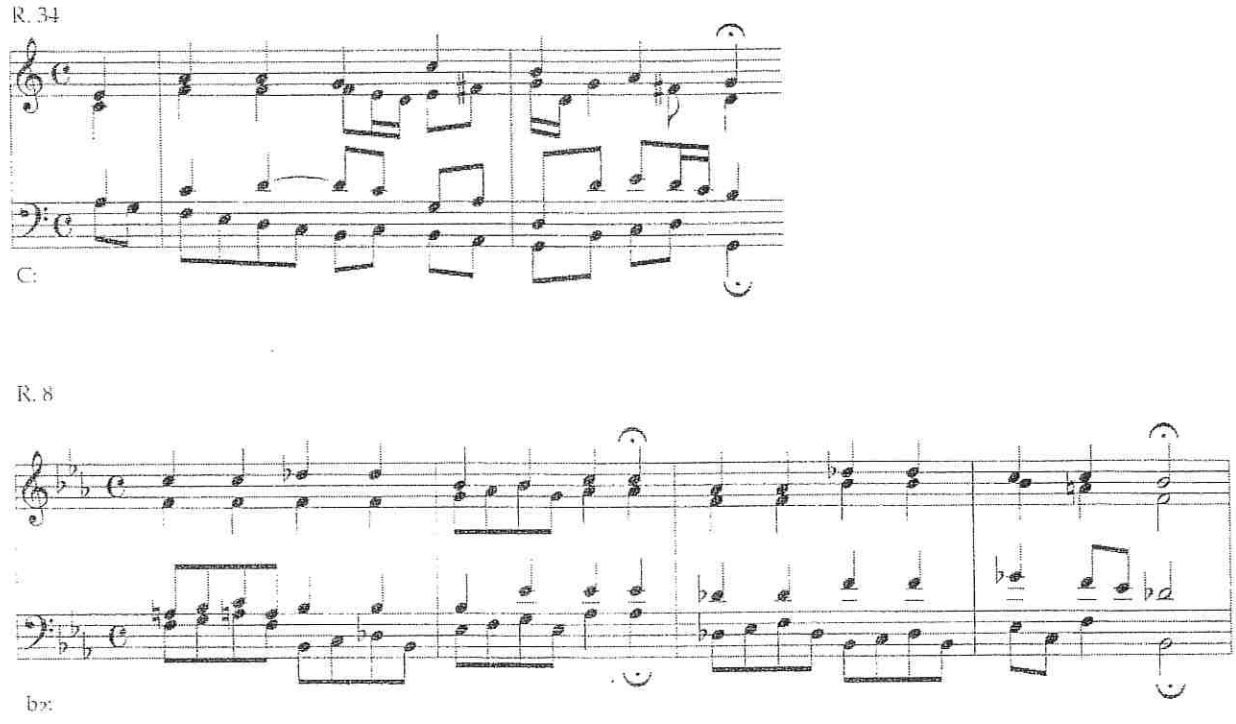


Bach's harmonisation R. 105



Exploring complex part-writing

The moving or 'runny' bass line



R68 Wenn wir in höchsten Nöten sein

R74 O Haupt voll Blut und Wunden

Avoiding mistakes and maximising marks at A2

Common causes of lost marks

- Consecutive/exposed octaves and fifths
- Failing to spot modulations (or add appropriate accidentals)
- Not making sure that the chords inserted fit with the chords given
- Repeating chords from weak to strong beats
- Doubling 4th in Cadential 6/4
- Not preparing dissonances (i.e. 7ths)
- Not including melodic decoration
- Presentation
- Failing to complete the exercise!