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A GENERALIZED APPROACH TO AUTOMATIC RECOGNITION OF MUSIC SCORES

NICHOLAS P. CARTER

CCRMA
DEPARTMENT OF MUSIC
STANFORD UNIVERSITY
STANFORD, CALIFORNIA 94305-8180

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NICHOLAS P. CARTER

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Nicholas P. Carter

Visiting Scholar, CCRMA, Music Dept., Stanford University, Stanford, CA 94305.
Visiting Researcher, CCARH, 525 Middlefield Road, Suite 120, Menlo Park, CA 94025.
SERC Postdoctoral Research Fellow, Dept. of Physics, University of Surrey, Guildford. U.K.
npcarter@ccrma.stanford.edu *or* phs1nc@ph.surrey.ac.uk

Abstract

The use of electronically-encoded versions of printed music scores is becoming widespread in applications such as point-of-sale printing systems, production of new editions, creation of Braille scores and playback via MIDI instruments. There is, therefore, a definite need for a practical system which automatically converts printed music into machine-readable form so that it can be made available to these applications. This can be seen as a direct parallel to the widespread adoption of Optical Character Recognition for text. In addition to the variations in font style and size which are also found in text, music conveys a large amount of information by the use of 2-dimensional arrangements of symbols. These symbols consist of both character forms (just like the alphanumerics in text) and variable shapes, including slurs, beams and crescendo markings. Further complicating the recognition task is the fundamental use of superimposition of symbols which is not normally found in text. These problems are discussed in the context of the SightReader score recognition system with illustrations of output and proposed future approaches.

1. Introduction

Printed music scores are being converted into machine-readable data files for various applications [Hewlett 1992]. This is normally done manually, either using a synthesizer keyboard, QWERTY keyboard, mouse, or a combination of these devices, in conjunction with music notation software. The aim of the current work is to produce an automatic score recognition system which can replace this process, at least for a large proportion of source material [Blostein 1992, Carter 1992a, 1992b].

Having reached the stage where some pages can be processed with accuracy of approximately 90% and the time taken to edit the output of the score recognition system for these pages has been shown to be less than the manual entry time, the question is how to make this true for the more general case? In other words, how is it possible to achieve 90% accuracy (and undercut the manual entry time) for as wide a selection of pages as possible. Some of the problems which have been encountered in development to-date are discussed below with special attention paid to the aim of widening the scope of the system. Thus it is a requirement that the software should be able to process images of varying size and resolution containing different fonts and with slight rotation of the image and a certain amount of noise. It can be assumed that there may be breaks in notestems, barlines and stafflines (which may also be bowed), and that some symbols may be touching due either to the quality of the original engraving or

to the printing process. Figure 1 illustrates a number of these problems, including bowed stafflines (due both to the original image and the use of a hand scanner), varying thickness and breaks in stafflines, notestems and barlines, extraneous marks (adjacent to the third C on the upper bass staff), and 'salt and pepper' noise (both specks of black in areas of white space and dropouts in beams and noteheads). All the above requirements are in addition to the unique problems of superimposition of symbols and the information implied by the 2-D arrangement of symbols.

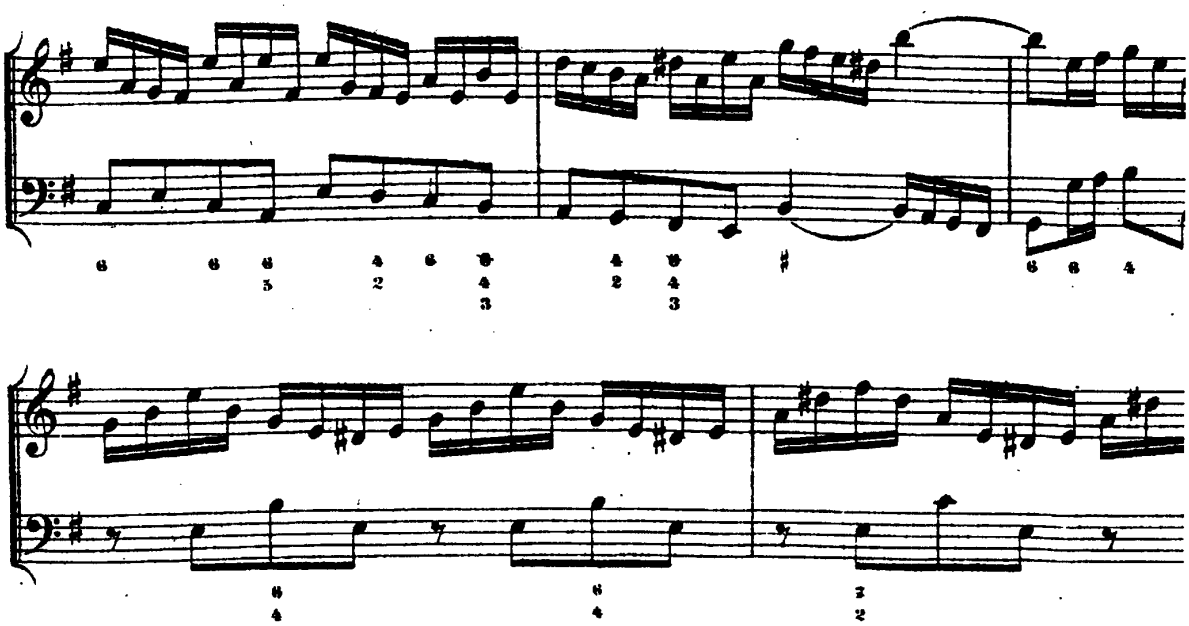


Figure 1. - Extract from Bach flute sonata in E minor.
(Source: Bach Gesellschaft scanned at 300 d.p.i. using a hand scanner)

The current system is built on the assumption that the image can be processed by first identifying stafflines and thus isolating the musical symbols (termed *objects*) and then recognizing each of these objects (which may in practice be a composite of multiple musical characters). There are a number of problems with this approach. Firstly, if the staffline recognition fails then this feeds through to all the subsequent processing - an accidental becomes attached to a notehead or a note becomes attached to a barline - leading to errors in recognition. Secondly, a reliance is placed on detection of line fragments which, in a poor quality original, can be severely fragmented and thus not recognizable as such. Thirdly, little use is made of context, in contradiction to the human vision approach which seems to make heavy use of all possible contextual information in order to solve problems such as locating fragmented lines. Lastly, trying to construct an algorithm which can cope with all possible composite objects (i.e. touching musical symbols after staffline removal) would seem to be an impossible task. On the other hand a routine which detects components of musical symbols, such as note stems, noteheads, tails, etc., and then assembles these into meaningful objects could be used to process any combination of symbols. There is also the issue of multiple voices on a staff. This can lead to complications when, for example, a voice 'drops in and out' as required - so that it isn't present throughout an entire staff - or when simultaneous events are so close in pitch that they are shifted horizontally (see figure 7 for examples of both phenomena). In the latter case it is not only necessary to recognize the notes but also to deduce that they take place at the same point in time despite the fact that they don't align vertically. Multiple voices

on a staff also produce composite objects where the parts are a third or less apart.

The crucial question with regard to the efficiency of using a score recognition system is whether the time taken to edit the output of the recognition software is less than the time that would be taken to enter the same material manually. Timings are given in section 7 for the processing and editing of a 10 page Haydn symphony. It is intended that this will be used as a timing trial so that a comparison can be made between the performance of the current version of the SightReader software and manual entry processes or, indeed, other score recognition systems. Previous, smaller scale versions of the trial undertaken in a less formal manner, have indicated that the SightReader system (as used by the author) can achieve timings comparable with a professional music engraver working with a manual entry system. It is interesting to compare similar tests which have been undertaken in the field of text encoding. A recent publication [Olsen 1993] has examined in detail the economics of using an OCR system instead of using manual encoding (keyboarding) and discusses some of the issues which were raised as a result of a trial involving the complete works in both English and French of Samuel Beckett. Although the hardware related costs involved are somewhat dated and serve to seriously skew the overall cost calculations, it is interesting to note the factors which are common to all fields of automatic recognition.

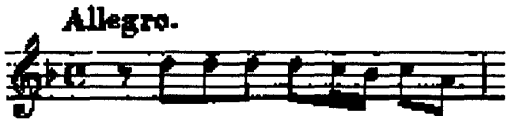
The overall structure of the paper is as follows:- Section 2, **Image acquisition**, deals with converting the printed page into digitized form. Section 3, **Segmentation**, describes the current system's use of run-length-encoding and region (section) formation which is the basis of the staffline-finding technique. Once stafflines have been detected the musical symbols are effectively isolated and are formed into objects (section 4). These objects are then processed by the recognition module which is the subject of section 5. The data file which is the output of the recognition system may contain a variety of information, some of which could be supplied by the music printing software which is to import the data file. The question of how much information to include in the file and how errors affect the interpretation of this file is the subject of section 6, **Information transfer**. The final section (**7 - Processed examples**) contains a series of pages which have been processed using the SightReader system. For Haydn's first symphony it includes copies of the original pages, the default reconstructions, the final edited versions and timings for both processing (machine time) and manual editing (human time). Illustrations of the default reconstructions of some other pages are also given. An illustrated glossary and references are provided at the end of the paper.

2. Image acquisition

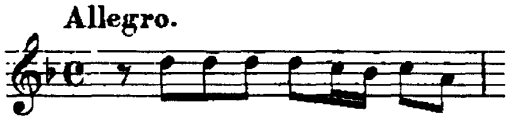
Image acquisition involves the conversion of the printed page of music into a digitized form. In the current work this is normally a binary image with a resolution of 300 dots per inch which is stored as a TIFF (Tagged Image File Format) file. The software is, however, designed to accept a range of resolutions because it uses relative measurements based on the distance between stafflines rather than absolute distances. It is interesting to note the resolution requirements of the human vision system. In the examples below, the image is legible at only 75 dpi and some information can be extracted even at 37.5 dpi. This would suggest the heavy use of context in order to achieve recognition. For example, in the 37.5 dpi image, the simple blob which appears on the middle staffline just to the right of the initial treble clef, can be assumed to be a B flat which forms the key signature. This is despite the fact that the symbol bears very little resemblance to the ideal structure of a flat symbol. So, no matter what the sampling resolution, it is often context which is more significant.This is especially the case with old

editions or miniature scores where the detail simply isn't present and so context has to be relied upon.

37.5 dots per inch resolution



75 dots per inch resolution



150 dots per inch resolution

Figure 2. Various digitizing resolutions

The use of multiple resolutions is also a technique which may be appropriate for score recognition, perhaps using an initial low resolution scan to determine the type of score which is present and its overall structure (it can be seen in the examples above that the stafflines are readily identifiable even at the lowest resolution). This would enable the early detection of an instrumental part or full orchestral score and, ideally, the number of staves and details of their arrangement into systems. The high resolution data need then only be stored and processed for the regions of interest determined by the low resolution scan. This is especially desirable given that changing the resolution from 75 to 300 dpi increases the data storage requirement by a factor of sixteen. In a production system it may be more appropriate to do a single pass high resolution scan but to convert this into a tree structure of rectangular regions containing either large areas of white space or 'regions of interest' (musical symbols, stafflines and small fragments of white space). This would speed searches and reduce storage requirements. The current system uses run-length encoding then region formation to achieve these goals. This means that white space is effectively disregarded once run-length encoding is complete. The advantage of using the blocks of white space in a tree structure may lie in their use in conjunction with information about the position of staves or musical symbols in order to improve reliability of the structural breakdown of the page. Perhaps this information could be used to detect text blocks such as headers and footers containing information about the composer, title, publisher, etc. It could also be used to assist in assigning 'free-floating' objects (those which are not physically attached to a staff) to the correct staff.

Although it seems intuitive to use a binary image when undertaking score recognition, previous work [Roach 1988] has made use of grey-scale images directly rather than working solely with the thresholded (binarized) image. Recent work in the field of document recognition has also explored this approach [Yamamoto 1993]. This has the disadvantage of increasing the amount of data which has to be processed - even 4 level grey-scale requires double the amount of storage of a binary image - with advantages only where the image is faint or in regions where the binarization threshold would have

been inappropriate.

There are other issues which need to be considered with respect to image acquisition. These include practicalities such as the storage needs of large quantities of image data (an 8.5" x 11" or A4 page scanned at 300 dots per inch as a binary image requires approximately 1MByte of storage), whether a standard desktop scanner has a sufficiently large scanning area (commonly 8.5" x 14" at most) to cope with the non-standard sizes found in printed music scores and whether the original material must be photocopied to facilitate handling where the music image is close to the maximum scannable size or for use in conjunction with a sheet-fed scanner. At the other extreme, the use of a hand scanner my require multiple passes of the page and then 'stitching' of the resulting strips to reconstruct the complete page. This may not be satisfactory if there is no distinct band of white space between each staff or system which can be used as the cut line to divide the page into separate strips.

3. Segmentation

The current system uses a transformation of the line-adjacency graph as the basis for image segmentation [Carter 1989]. This has the advantage that only one pass is made over every pixel in the image (in order to produce the run-length encoding) and then the vertically-orientated run-lengths (*segments*) are grouped together into regions (*sections*). Subsequent processing can then deal with the sections and need not refer to the bitmap, although it is possible to reconstruct the original image from the section data. The sections are also useful because they form a first approximation to the correct structural breakdown of the image, for example, staffline fragments, noteheads and beam fragments are often single sections

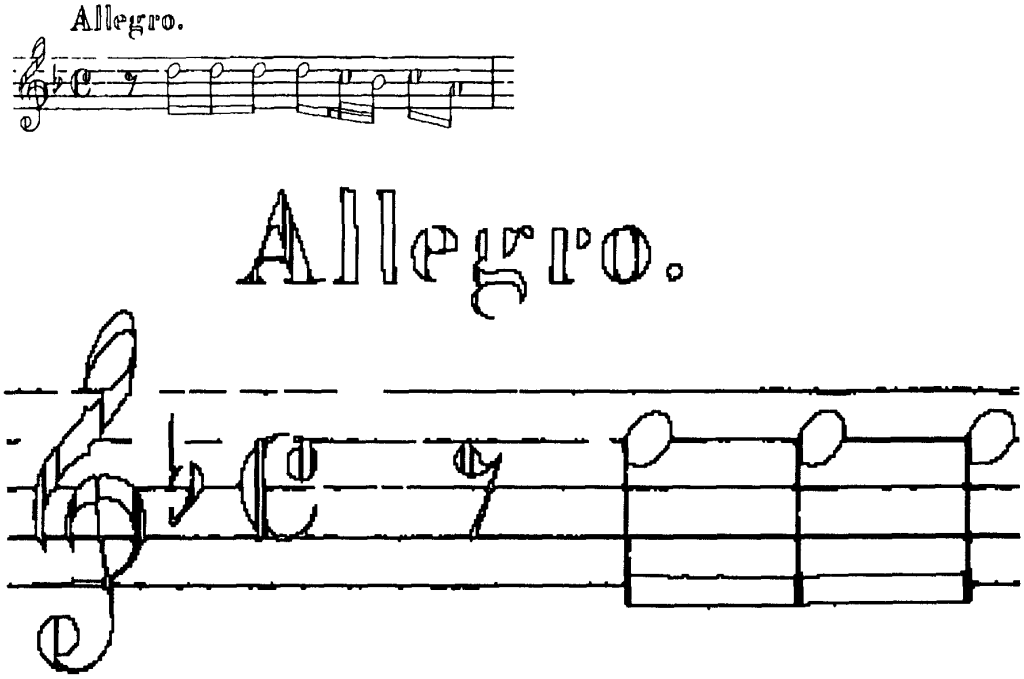


Figure 3.Illustrations of the outlines of sections (the outlines are drawn with thickness of one pixel so that only those sections which are greater than two pixels thick appear hollow)

The next processing step attempts to divide sections into staffline and non-staffline. Initially, line fragments (sections of high aspect ratio, termed *filaments*) are found, then an attempt is made to group these together into overlapping and roughly equi-spaced sets of five. Each set of five constitutes a potential *staff fragment*. Sometimes, of course, there will be line fragments in the image which are not part of a staffline. Some of these will be at too large an angle to the line fragments which they overlap for them to be considered parallel, while others, such as long beam fragments will be too thick compared to the majority of line fragments. Even after these filtering operations, there may still be spurious staff fragments - most commonly where an isolated ledger line exists adjacent to a bare portion of staff. In such a situation the six parallel lines may well produce two candidate staff fragments.

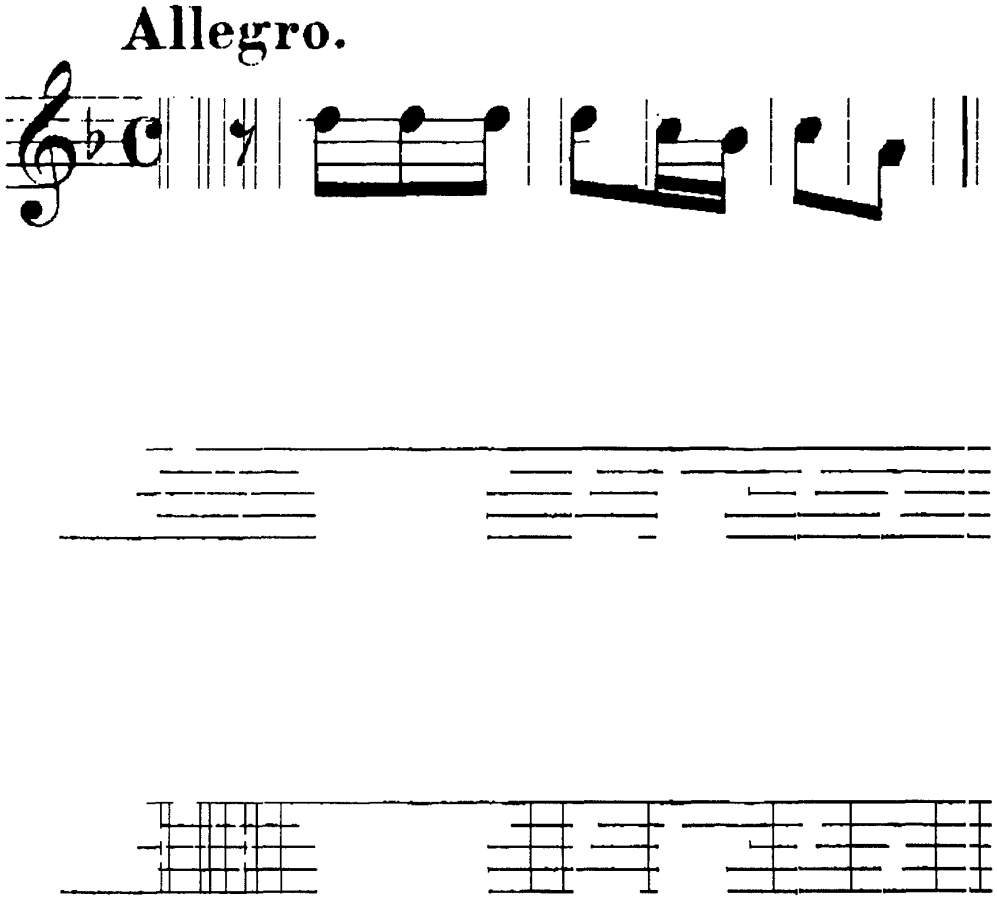


Figure 4. Location of the staff fragments
(i. The horizontal position of the centre of each staff fragment is indicated by a vertical line. The sections which constitute the staff fragments have been removed,
ii. The sections which constitute the staff fragments
iii. The staff fragments with their horizontal position marked.)

The next operation attempts to link together, across the page, strings of staff fragments. At this stage

any staff fragments which are mis-aligned, such as in the situation just described, are rejected. Next, by a process of interpolation between staff fragments and extrapolation beyond the endmost staff fragments, an attempt is made to find all other staffline sections. At this stage, all sections which have been classified as non-staffline are examined using a depth-first graph traversal technique in order to group together each set of connected sections into an *object*. An object will normally consist of a single musical symbol but may contain multiple symbols (where these are superimposed or touching) or an isolated symbol fragment.

The staffline recognition phase works reasonably well and provides clean isolation of the musical symbols in a variety of cases. If a staffline fragment is bowed, its section can still be categorized as a filament and thus become part of a staff fragment or it can be classified as a staffline section during the interpolation/extrapolation process.

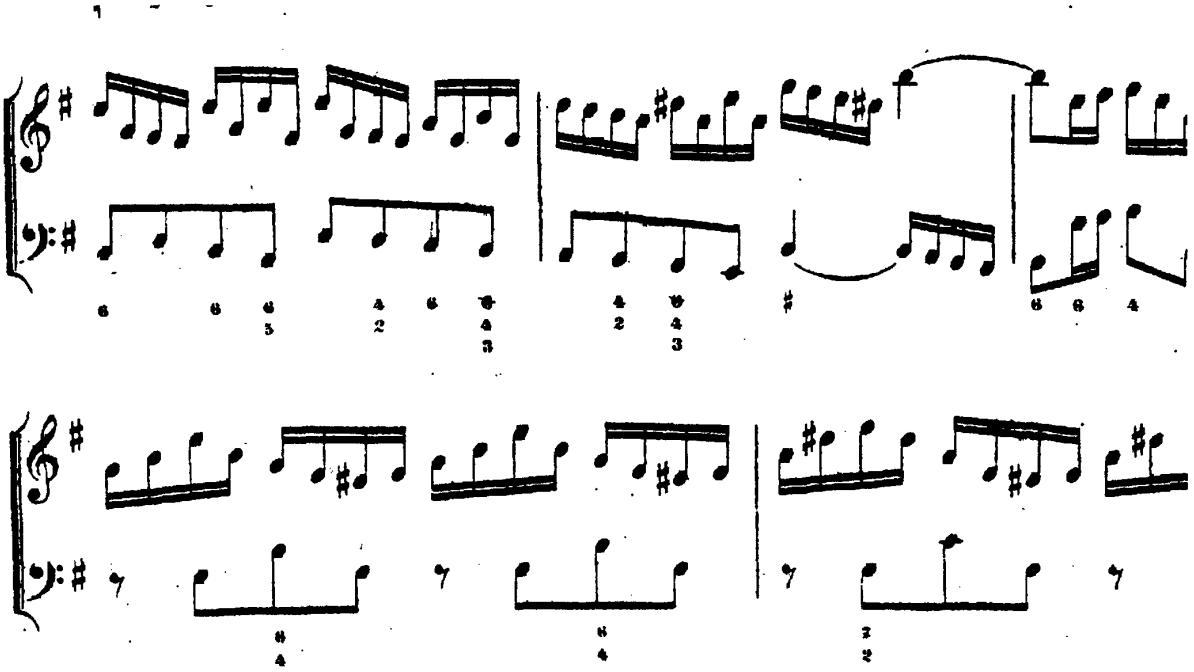


Figure 5. - After stafflines have been recognized removed from figure 1.

Breaks in stafflines can be coped with because of the interpolation and extrapolation operations - assuming that the breaks are not so severe and numerous that few filaments and staff fragments can be found. Noise in the form of variation in thickness of stafflines is not a problem because each section is effectively modelled as a parallelogram based on the section's centre-line (a least-squares fit line through the mid-points of its constituent segments) and average thickness. Also, slight rotation of the page does not reduce the usefulness of the sectioning, filament detection and staffline section finding processes. However, there are situations where clean symbol isolation does not result. This may be because a section is not correctly identified as being part of a staffline or because a section contains both segments which belong to a staffline and also segments which belong to a musical symbol. This sometimes occurs where a sharp sign is positioned on a staff space, so that the cross-strokes of the symbol are superimposed on the stafflines (Figure 6).

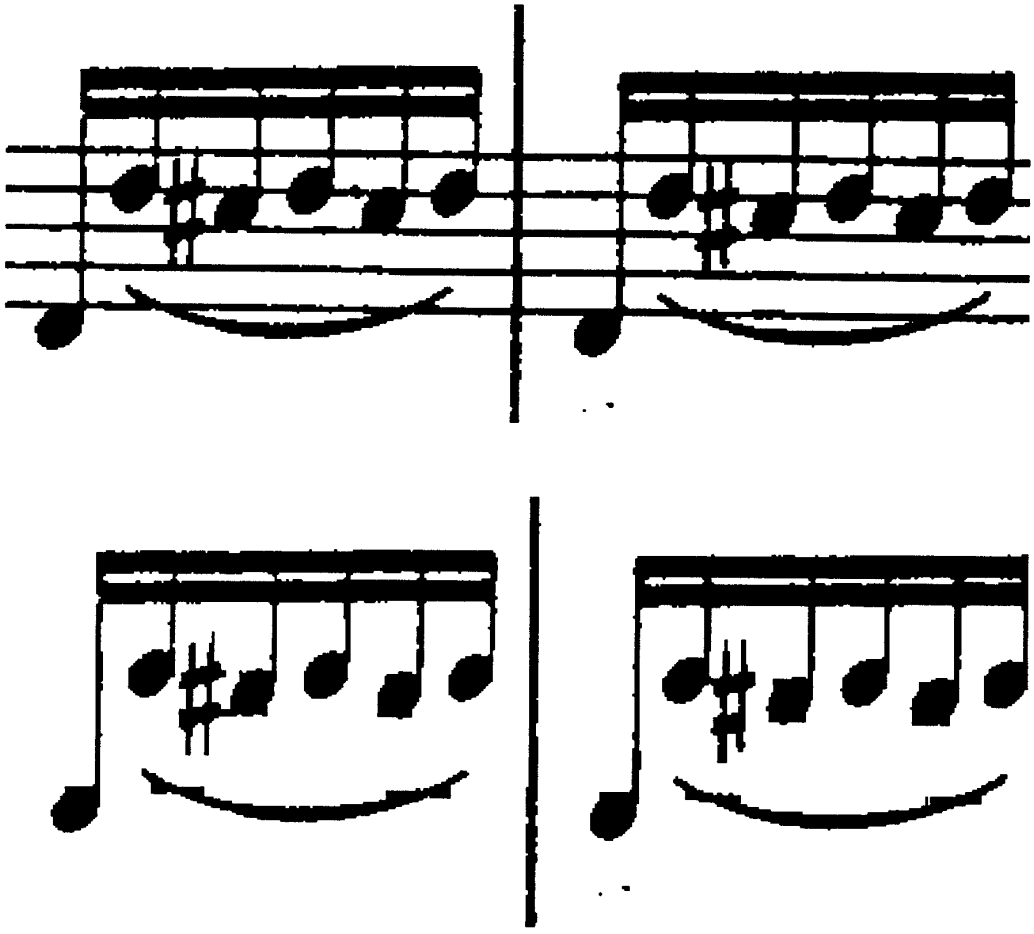


Figure 6. - The problem of sections which contain both staffline segments and symbol segments.
i.) An image fragment which contains two instances of sharp signs positioned on staff spaces
ii.) The two sections which consist of both symbol and staffline segments are classified by the staffline-finding process as symbol because their average thickess exceeds the maximum permitted for stafflines. Hence the sharp signs remain attached to the beamed groups.

In general terms, the approach is more successful on music which is less dense, i.e. where there is plentiful white space and numerous portions of exposed stafflines. This leads to the detection of a large number of reliable staff fragments and minimizes the reliance placed on the interpolation and extrapolation processes. If, on the contrary, the stafflines are largely obscured by multiple beams or closely-packed noteheads, there will be fewer staff fragments and thus the interpolation between these will take place over greater distances with consequent reduced accuracy. This is somewhat in line with human ability, in that denser music is generally harder to read and, especially if ledger lines are involved, the stafflines harder to identify. In order to improve the current method, which is one-pass, there would seem to be benefit in using an iterative approach to staffline recognition. This might be most useful if it were to become a part of the symbol recognition process. Thus, where an object cannot be recognized because it consists of multiple symbols which are joined due to the failure of the staffline recognition phase to correctly identify a staffline section, that area of the score would be re-examined

for staffline sections but using slightly different parameters. This may produce a cleaner attempt at symbol isolation and a consequent improvement in the accuracy of the recognition process.

4. Object formation and processing

Objects are formed by using a depth-first traversal of the graph structure formed by the connected non-staffline sections. Thus, an object may consist of a single musical symbol, a fragment of a symbol (where, for instance a notehead has become detached due to a break in its stem) or multiple symbols which touch or are superimposed. In music where there is largely a one-to-one correspondence between objects and symbols, this approach works well. The current system can also cope with a certain number of permutations of superimposed symbols, such as slurs and barlines. Where a large number of crescendo or diminuendo signs (hairpins) and also some slurs, cut through a sequence of barlines, this results in one large and complicated object. In such situations, a failure is more likely to occur and the incorrect structural breakdown of the score will then result. This then feeds through to all subsequent processing. Similarly, where the print quality of an image is poor and the musical symbols are commonly fragmented, the objects which each contain a separate fragment need to be linked together to reform the original symbol. Situations also occur where mixtures of the above circumstances are involved, for instance a fragment of a musical symbol my touch a slur which is part of a multi-symbol object containing several slurs, hairpins and barlines. An iterative technique such as is used at present could be applied to this complicated composite symbol, repeatedly removing barlines and slurs and examining the items remaining. It would seem, however, that a combination of the two approaches is required, i.e. iterative simplification (successively removing identified symbols from a composite object) and also collecting together symbol fragments in order to form an identifiable symbol. The number of possible fragments which can occur in a page of music score is high and similarly the variety of symbols which may exist in a composite object is large, so the algorithms necessary to implement such approaches must inevitably be complex. In seeking a solution to this problem, consideration must also be given to the actual recognition process used on the symbols. For example, in a poor quality image a treble clef may only consist of the top half of the conventional symbol and this may also be fragmented. The system must still recognize these pieces as a treble clef. This makes the demands placed on the system even greater and would seem to indicate the necessity to make more extensive use of context.

It might be useful in tackling the problem of complex composite symbols to make a first pass over the section list and to remove those curved sections which form a part of a slur or tie. As slurs and ties are the most common of the intersecting symbols this would greatly assist in simplifying the remaning objects. The model used to define what constitues a part of a slur would have to be carefully defined so that other objects would not be fragmented by this process. Multiple slur fragments could be pieced together by a curve-fitting technique to show that they were indeed part of a single slur which cut through other objects. Although this approach seems promising, it is tailoring processing to one particular type of symbol and seems to suggest instead a global extension of the technique, i.e. locating those types of sections which can be more confidently identified (solid noteheads, slurs, beam fragments, etc.) and then progressively working on identifying the remaining sections. This approach will be examined in more detail in section 5 which deals with symbol recognition.

An example will serve to illustrate the problems of fragmentation outlined above. Figure 7 is from a Dover edition of the Bach solo violin works and contains numerous fragmented symbols, superimposed

musical symbols and combinations of these two problems. For instance, not only are two beamed groups superimposed but one of the noteheads involved is not physically attached to its beaming complex.

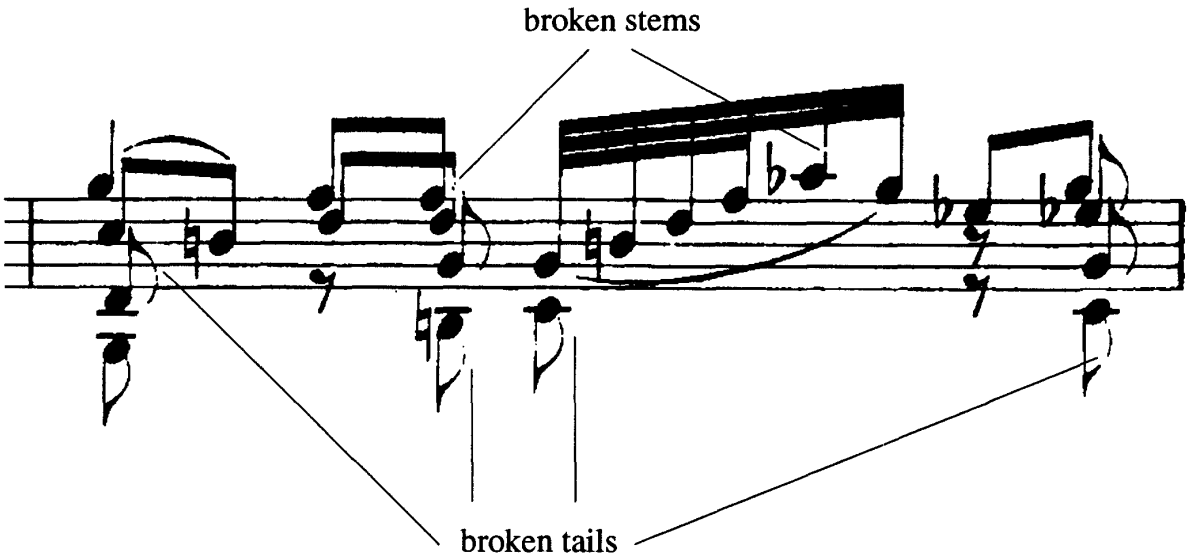


Figure 7. - An extract from the Sonatas and Partitas for
Unaccompanied Violin (Dover Edition; original engraving - Breitkopf & Härtel)

When the system is presented with the object containing the two beamed groups it must first decompose the object into the appropriate components (beaming complex, note stem, note head, etc.) and then deduce which nearby objects should also be a part of the beamed groups. It is difficult to conceive of an approach which could incorporate both decomposition and amalgamation of objects while also integrating iterative processing (to cope with errors in staffline recognition) without these all being integrated. This implies the need for a complex recognition engine which works iteratively and has various tools at its disposal including decomposition and amalgamation of objects but which can work on all levels of representation of the score (from the bitmap up to the final output data file). The work which is closest to this approach has been undertaken by Kato and Inokuchi [1990], making use of multiple layers of interpretation and a blackboard for posting results. This includes removal of results which are later found to be erroneous or have a "better" interpretation. The music examples which are shown are limited and do not give a complete picture of the limitations of the system, in particular the use of the blackboard technique. It would be interesting to know how well the system works with a wider range of repertoire and to see score reconstructions based on the output data. It is also unfortunate that the designers made some assumptions about music notation which are not valid in all cases. For example, multi-staff systems are processed simply by using a horizontal cut line to separate each staff from its neighbour and then each region is processed separately. This technique will sometimes associate symbols with the incorrect staff as a result and may also cause mis-recognition where a symbol becomes fragmented due to the process of splitting the score into regions.

At present the SightReader system stores the details of each object in a separate data structure. It is

clear, however that it would be useful to have links between nearest neighbours so as to facilitate searches for notes associated with accidentals, dots, accents or other markings. At present a search has to be undertaken throughout the entire list of objects, although where possible use is made of the fact that successive objects will have equal or increasing x-start (leftmost x) values. This is a direct result of the use of the sections (which are ordered left-to-right and bottom-up) in forming the objects. No such assumption can, however be made for the location of the rightmost extremity (the x-end value) of each object. Balanced against the advantage of having access to a linked list of nearest neighbour objects is the time taken to form such links and the fact that the searches mentioned above are not undertaken for all objects, indeed often a small minority. The idea of having a linked list of nearest neighbours might be usefully applied instead to all the components in the image, as a supporting structure to the integrated decomposition, amalgamation and iterative-processing approach outlined above. In that way, as components are identified they will be a part of the web of links, so that symbols which prove unrecognizable can be re-examined in the context of other local components, thus perhaps providing the necessary contextual information to achieve recognition. This data structure would enable the iterative processing which was proposed above as a means of improving the accuracy of staffline recognition. Indeed, the section list may still form the basis of such a structure. Extra links associated with each section would provide the pointers to nearby sections and mechanisms could be put in place to split and merge sections. Indeed the latter already exists - it is used, where appropriate, to amalgamate the remaining sections when a noise section is removed. Thus, final recognition would result when the section list was a 'best-fit' for the structural breakdown of the original image, including the categorization of sections as staffline and non-staffline.

The first step after object formation currently involves the determination of the overall structure of the music, including the number of staves on the page, how these are organised into systems, how the systems are barred together, the number and position of the barlines, and so on. This process deduces the grid of measures within which the symbols are contained. For each measure, a list of symbols is established which contains the objects attached to the appropriate staff within the horizontal limits of that measure (determined by the relevant barlines). At this stage it will now be known whether the score is an instrumental part with one staff per system throughout the page or if it is an instrumental ensemble score. With this knowledge the system can determine whether vertical alignment between staves is significant. Obviously, in the case of an instrumental part with single-staff systems, vertical alignment between staves will be of no use but this will not be true for orchestral scores. At present no use is made of this alignment information but it is seen as a significant component of a future iterative processing system such as the one outlined above.

5. Symbol recognition

In order to achieve recognition of the symbols, a number of tests are used. For instance, the size of the object's bounding box is examined to isolate larger symbols such as barlines, beamed groups and single-stemmed notes whilst objects consisting of only one section are placed in another category. Emphasis is placed on the detection of vertical lines within an object. A beamed group will contain two or more vertical lines, a simple single-staff barline will be made up entirely of one vertical line and a single-stemmed note will contain one line. This approach is valid for clean images where the vertical lines are unbroken but for an example such as the Bach above there are numerous instances of breaks in note stems. This may lead to the system not detecting a vertical line and a beamed group would thus lose one or more of its constituent stems. An algorithm has been incorporated which takes account of

the situation where a fragment of a notestem (sufficient to be detected as a vertical line) is attached to the beaming complex but the rest of the note has become detached. In this case, a search is undertaken throughout the bar's object list to try to find the 'breakaway' note. If the note is attached to the staff at the appropriate position within the horizontal limits of that particular bar then it should be found and can be processed just as if it was an integral part of the original beamed group. However, if the note is unattached to the staff then a search of all objects must be made in order to locate the 'free-floating' note. Similarly, once this is found, it can be processed in the same way as a note which is physically attached to the beamed group. If the break in the notestem is close to the beaming complex and consequently a vertical line is *not* detected within the beamed group, then no search is undertaken for the separated note. This will often mean that the separated note will be processed strictly in sequence, i.e. after the beamed group, and will then be recognized as a standalone quarter note. As no knowledge of multiple voices per staff is built in to the system at present, the quarter note will appear in the data file after the beamed group and will be reconstructed accordingly.

To give some idea of the complexity of simply processing the possible permutations of pitches which may occur attached to a single-stemmed note, a more detailed description follows. Having found a vertical line within an object which has been classified as a single-stemmed note, a search is undertaken for other notestem fragments. These need not be as long as a vertical line but must be of appropriate thickness and collinear with the main vertical line (the notestem). The notestem fragments will exist where ledger lines are used and thus pieces of the notestem are positioned between the ledger lines. Once all the notestem fragments have been found, they are sorted into ascending order. A search is then undertaken on both sides of the stem to find individual noteheads or groups of noteheads. These are stored as *y extents* giving the top and bottom position of each notehead cluster on the left and right sides of the stem. A test compares the height of a cluster with the spacing between stafflines in order to determine how many pitches are present. The clusters are then tested to see which stafflines they overlap, for example a single notehead located in one of the four spaces on a staff will overlap two stafflines, an F major triad on the treble staff will overlap four stafflines. Where there are multiple clusters on a stem these must be processed in a particular order in case any use ledger lines. If any clusters are attached to the staff, these will be processed first, followed, in descending order, by those below the staff and then, in ascending order, by those above the staff. The order is important because a notehead which is far from the staff may have its ledger lines obscured by other noteheads attached to the same stem and thus its pitch must be calculated based on these previously processed noteheads. In this way the pitch is determined by counting the ledger lines between the note cluster and either the staff *or* the previous note cluster.

The processing described above is all based on the use of sectioning (derived from either horizontally or vertically-orientated run-length encoding). Once the vertical line segments have been identified they are erased in a standalone image which just contains a reconstruction of the original object and then the resulting image is re-sectioned. It is the sections derived from this 'stemless' version of the object which are examined for potential noteheads. As a result of the use of this method, an extra test is required to determine whether an isolated pair of noteheads which exist on either side of the stem (because they are a second apart) have formed a single section.

6. Information transfer (the output data file)

Once recognition processing is complete, the results are transfered to the data file which

constitutes the final output of the system. This data file contains the pitch and rhythm values for the notes and rests and also representations of the clefs, barlines, slurs and other symbols which have been identified. An example file is shown in figure 8 below. It contains the data for a 300 dots per inch version of figure 2.

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IN 1 0 0 .70

TR/R/R/D5/D5/D5/D5/C5/B4/C5/A4/M1;
8/8/8/8/8/8/16/16/8/8;
;
1 3/4 6/7 8;
;
```

Figure 8 - The SCORE format data file for figure 2
(IN 1 indicates input for staff 1,
TR = treble clef, R = rest, M1 = measure (bar) line covering one staff,
pitches are given as a letter followed by the octave number,
8 = eighth note, 16 = sixteenth note,
the last line of numerals are the note numbers for beams)

There are numerous questions which arise in determining how much information to transfer in this file. For example, should the stem direction of each note be indicated or should reliance be placed on the musical knowledge built into the music printing software (which will reconstruct the score from the file) to make correct decisions regarding stem direction? Should all absolute dimensions such as staff height, staff length, spacing between staves, etc., be stored in the file? Should the relative positions of articulation markings be preserved or is it sufficient to indicate that a particular note has such a mark attached? Should the graphical parameters of a slur be encoded or can it be indicated simply by tagging the notes to which it is attached? There is a distinction to be made here between reconstructing the *appearance* of the original score and reconstructing the *musical content* of that score. At present the system does not pass notestem direction in the data file although it does have this information available. It is anticipated that this information will in future be included in the data file so that it can be used or overridden by the reconstructing software as desired. The presence of articulation markings and slurs is currently indicated using one or two note numbers respectively. Thus the default positions and shapes will be used upon reconstruction, although it would certainly be possible to encode detailed measurements. The present approach is aimed towards preserving the musical content of the original image, whilst the precise appearance of the score is seen as a stylistic issue which may well change according to the requirements of the end-user of the data file. A music publisher, for example, may wish to apply their own style sheet to a score data file so that the resulting printed pages conform to a house style, using a preferred font, certain minimum spacings, a maximum beam slope and so on.

There are other issues which affect both information transfer and recognition. If a page has multiple systems then these must be recognized as such and stored accordingly. The reconstructing software may, however, use a continuous 'piano roll' form of representation which requires these separate systems to be stitched together into one unbroken stream. This is commonly done in music notation software so that page layout becomes a distinct process whereby the user can specify any combination

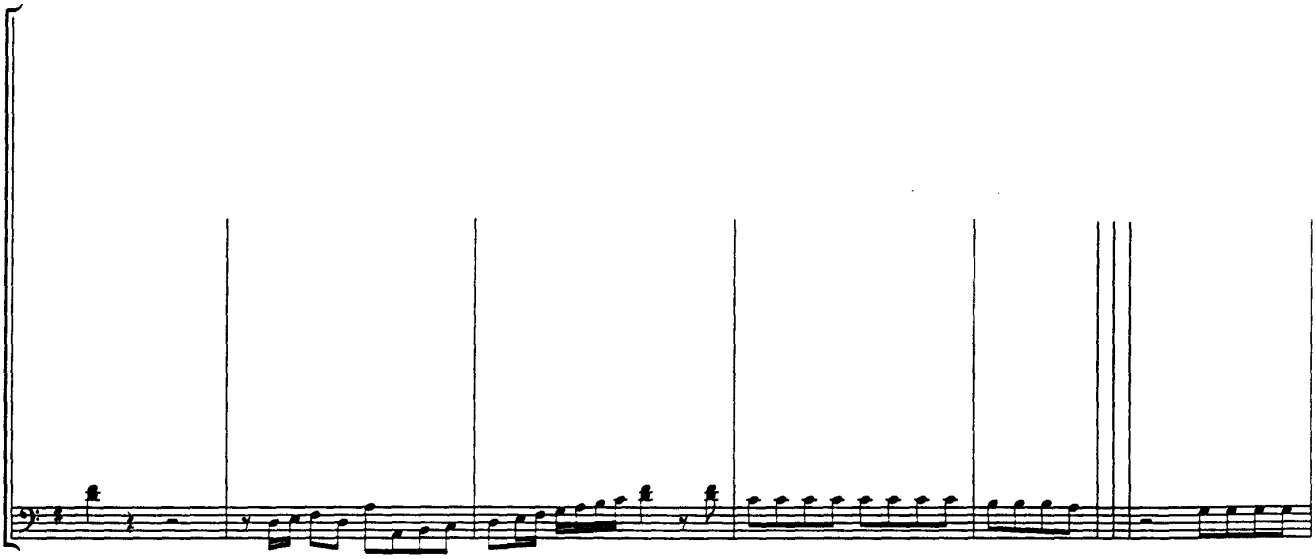
of measures per line or systems per page. It would be possible to undertake this 'stitching' process within the recognition system, assuming that the number of staves per system remained constant or that some means existed of identifying which instruments were present. The location of system breaks and the number of systems per page could then be preserved in the data file to be used only if desired by the reconstructing software. Multiple pages from a single work which had been scanned and processed as separate images could be similarly joined. Again, these are mainly graphic issues rather than questions of representing musical content, although this is less true for page turns which may have been carefully chosen to facilitate performance. Joining systems with unequal numbers of staves is a more difficult problem which might entail the use of character recognition in order to identify the instrument names printed to the left of each staff. Consistency checks could also be made for the clef and key signature in moving from one staff to the next.

7. Processed examples

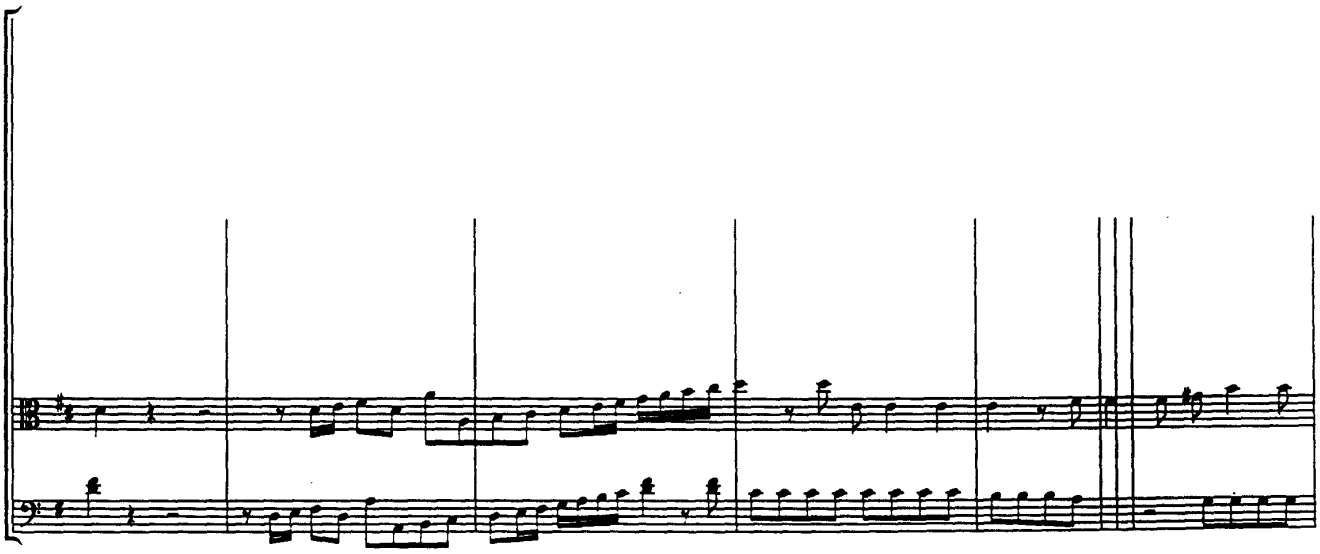
The following pages contain examples of images which have been processed by the current version of the SightReader system and reconstructed using the SCORE[1] desktop music publishing program. Also shown are some of the data files output by the system. For each page of Haydn's first symphony the complete SCORE file is shown. The encoding of the lowest system from page 1 of the symphony is also shown in a measure-orientated file format. SCORE treats each complete line as a single entity and this is the cause of the mis-alignment which can be seen in the reconstructions. By way of explanation, an illustration is given on the following page of the organizational structure used by SCORE, showing how the barlines are only encoded *in the lowest staff of a system* and how each staff is spaced independently of the others in the system. Where the recognition system makes a mistake and the *total duration of a staff* is not consistent with the lowest staff in its system, misalignment will occur. So, although the system is aware that a symbol is positioned in a particular measure (as can be seen in the measure-oriented file) it will not necessarily appear between the appropriate barlines when reconstructed using SCORE. Of course, once touch-up editing is complete, the total rhythm values of all staves in a system will match and the 'Lineup and Justify' (LJ) command can be used. This will automatically cause all the symbols to move into correct alignment as can be seen in the edited versions of the pages. So, as far as accuracy is concerned, it is not so much the initial appearance of the reconstruction which is important, rather the number of correct symbols and markings in sequence on each staff. It is planned that an interpreter for a measure-oriented file format will be added to the Finale[2] music printing software package so that measure-oriented data can be reconstructed. The rhythmic errors of the recognition system will then be localized to individual measures.

For the following pages, the SightReader software was run on a Series 700 Hewlett-Packard workstation although it also runs on IBM pc-compatibles and NeXT and Sun workstations. It runs as a batch process since it requires no user-interaction. The pages were scanned at 300 dots per inch resolution on a Hewlett Packard ScanJet with the production of the TIFF file for each page taking approximately 30 seconds.

1 - SCORE is a trademark of San Andreas Press.
2 - Finale is a trademark of Coda Music Technology.



The SCORE items attached to staff 1.



The items on staff 2 are spaced independently of staff 1.

The organizational structure used by SCORE showing that the total rhyhm value for each staff must match the lowest staff in the system in order for the notes to be aligned.

Symphony No. 1 - Joseph Haydn.
(publ. - Breitkopf & Härtel) - 10 pages.

Each original page is followed by its default reconstruction (using SCORE to reconstruct from the data file produced using the SightReader system), the SCORE data file and then the final edited version. The original pages are reproduced at 90% of the true size. The default staff height and inter-staff spacing were altered in the reconstructed pages in order to fit the examples onto 8.5" x 11" pages. The times for recognition processing and editing for each page are given below. Also illustrated for page 1 is the measure-oriented file format output by the score recognition system. The pages are arranged so that the original and its reconstruction are on facing pages.

Timings for conversion into electronic form

Page No.	Recognition processing time (from TIFF file to SCORE data file)	Editing time
1	1min.	1hr. 4 mins.
2	1min. 13 seconds	1hr. 17 mins.
3	1min. 14 seconds	1hr. 9 mins.
4	1min. 12 seconds	1hr. 7 mins.
5	1min. 10 seconds	1hr. 9 mins.
6	3mins. 6 seconds	1hr. 21 mins.
7	1min. 17 seconds	44 mins.
8	1min. 4 seconds	39 mins.
9	56 seconds	44 mins.
10	56 seconds	31 mins.

Total machine time for recognition processing was therefore 13 minutes and 8 seconds and total editing time was 9 hours and 45 minutes. Thus, the ratio of human time to machine time is in excess of 40:1.

Two pages from Symphony No. 2 - Joseph Haydn.

Details regarding the illustrations are the same as for symphony no. 1.

Timings for conversion into electronic form

Page No.	Recognition processing time	Editing time
11	1min. 45 seconds	34 mins.
12	1min. 29 seconds	29 mins.

Total machine time for processing these two pages was 3 minutes and 14 seconds and total manual editing time was 1 hour and 3 minutes.

```
system3  staff1
    measure1
        TR (object 21)
        K2S (object 59)
        (:)
        Rest 1
    measure2
        Note A5 C6 4
        Note G5 2
    measure3
        Note D5 F5 A5 4
        Rest 2
        Rest 4
    measure4
        Rest 1
    measure5
system3  staff2
    measure1
        TR (object 15)
        Rest 1
    measure2
        Note F5 A5 2
        Note D5 A5 C6 4
    measure3
        Note C5 E5 G5 4
        Rest 4
        Rest 2
    measure4
        Rest 1
    measure5
        Rest 1
system3  staff3
    measure1
        TR (object 17)
        K2S (object 54)
        (:)
        Beamed group [4 stems]
        D5 16
        A4 16
        B4 16
        C5 16
        Beamed group [4 stems]
        D5 16
        E5 16
        F5 16
        G5 16
        Beamed group [4 stems]
        A5 8
        B5 8
        C6 8
        D6 8
        S 9 (object 210)
        S 10 (object 220)
        S 11 (object 238)
        S 12 (object 250)
    measure2
        Note A5 2
        Note G5 2
    measure3
        Note F5 4
        Rest 8
        Beamed group [2 stems]
        D5 16
        E5 16
        Beamed group [4 stems]
        F5 8
        E5 8
        F5 8
        GS5 8
        (#2)
    measure4
        Beamed group [3 stems]
        A5 8
        A4 16
        A4 16
        Beamed group [4 stems]
        C5 16
        C5 16
        E5 16
        E5 16

        Beamed group [3 stems]
        A5 8
        C6 16
        B5 16
        Beamed group [4 stems]
        A5 16
        G5 16
        F5 16
        E5 16
    measure5
        Note D5 8
    measure6
        Note B3 4
    measure7
    measure8
        Note C4 A3 8
        Beamed group [3 stems]
        GS3 8
        G4 16
        G4 16
        Rest 4.
        Beamed group [4 stems]
        G5 16
        F5 16
        E5 16
        D5 16
system3  staff4
    measure1
        TR (object 14)
        K2S (object 50)
        (:)
        Beamed group [3 stems]
        F4 16
        B4 16
        C5 16
        Note A4 4
        Beamed group [4 stems]
        D5 16
        E5 16
        F5 16
        G5 16
        ? (object 167)
        Beamed group [4 stems]
        A5 8
        B5 8
        C6 8
        D6 8
        S 9 (object 209)
        S 10 (object 219)
        S 11 (object 237)
        S 12 (object 248)
    measure2
        (#2)
        Rest 8
        Note D5 4
    measure3
        Note D5 4
        Rest 4
        Beamed group [4 stems]
        D5 8
        C5 8
        D5 8
        B4 8
    measure4
        Note B4 A4 8
        Note A4 4
        Note A4 4
        Note A4 4
        Note A4 8
        SL 23 24 (object 1868)
    measure5
    measure6
    measure7
    measure8
        Beamed group [3 stems]
        B4 16
        GS4 16
        F4 16
        Rest 8.
        (#2)
        Beamed group [2 stems]
        E4 8
        E4 8
        Note E4 4
        Note E4 8
        SL 30 99 (object 680)
system3  staff5
    measure1
        AL (object 13)
        (:)
        (:)
        K2S (object 52)
        (:)
        Note D4 4
        Rest 4
        Rest 2
    measure2
        Rest 8
        Beamed group [2 stems]
        D4 16
        E4 16
        Beamed group [2 stems]
        F4 8
        D4 8
        Beamed group [4 stems]
        A4 8
        A3 8
        B3 8
        C4 8
    measure3
        Beamed group [3 stems]
        D4 8
        E4 16
        F4 16
        Beamed group [4 stems]
        G4 16
        A4 16
        B4 16
        C5 16
        Note D5 4
        Rest 8
        Note D5 8
    measure4
        Note E4 8
        Note E4 4
        Note E4 4
        Note E4 4
        Rest 8
    measure5
    measure6
        Note F4 8
        Note F4 4
    measure7
    measure8
        Note F4 8
        (#2)
        Note GS4 8
        Note B4 4
        Note B4 8
system3  staff6
    measure1
        BA (object 12)
        (:)
        K1S (object 58)
        Note D4 F4 4
        Rest 4
        Rest 2
    measure2
        Rest 8
        Beamed group [2 stems]
        D3 16
        E3 16
        Beamed group [2 stems]
        F3 8
        D3 8
        Beamed group [4 stems]
        A3 8
        A2 8
        B2 8
        C3 8
    measure3
        Beamed group [3 stems]
        D3 8
        E3 16
        F3 16
        ? (object 389)
        Beamed group [4 stems]
        G3 16
        A3 16
        B3 16
        C4 16
        Note D4 F4 4
        Rest 8
        Note D4 F4 8
    measure4
        Beamed group [4 stems]
        C4 8
        C4 8
        C4 8
        C4 8
        Beamed group [4 stems]
        C4 8
        C4 8
        C4 8
        C4 8
    measure5
        Beamed group [4 stems]
        B3 8
        B3 8
        B3 8
        A3 8
    measure6
    measure7
    measure8
        Rest 2
        Beamed group [4 stems]
        G3 8
        G3 8
        G3 8
        G3 8
END
```

Measure-oriented data for page 1, system 3.

Symphonie Nr. 1

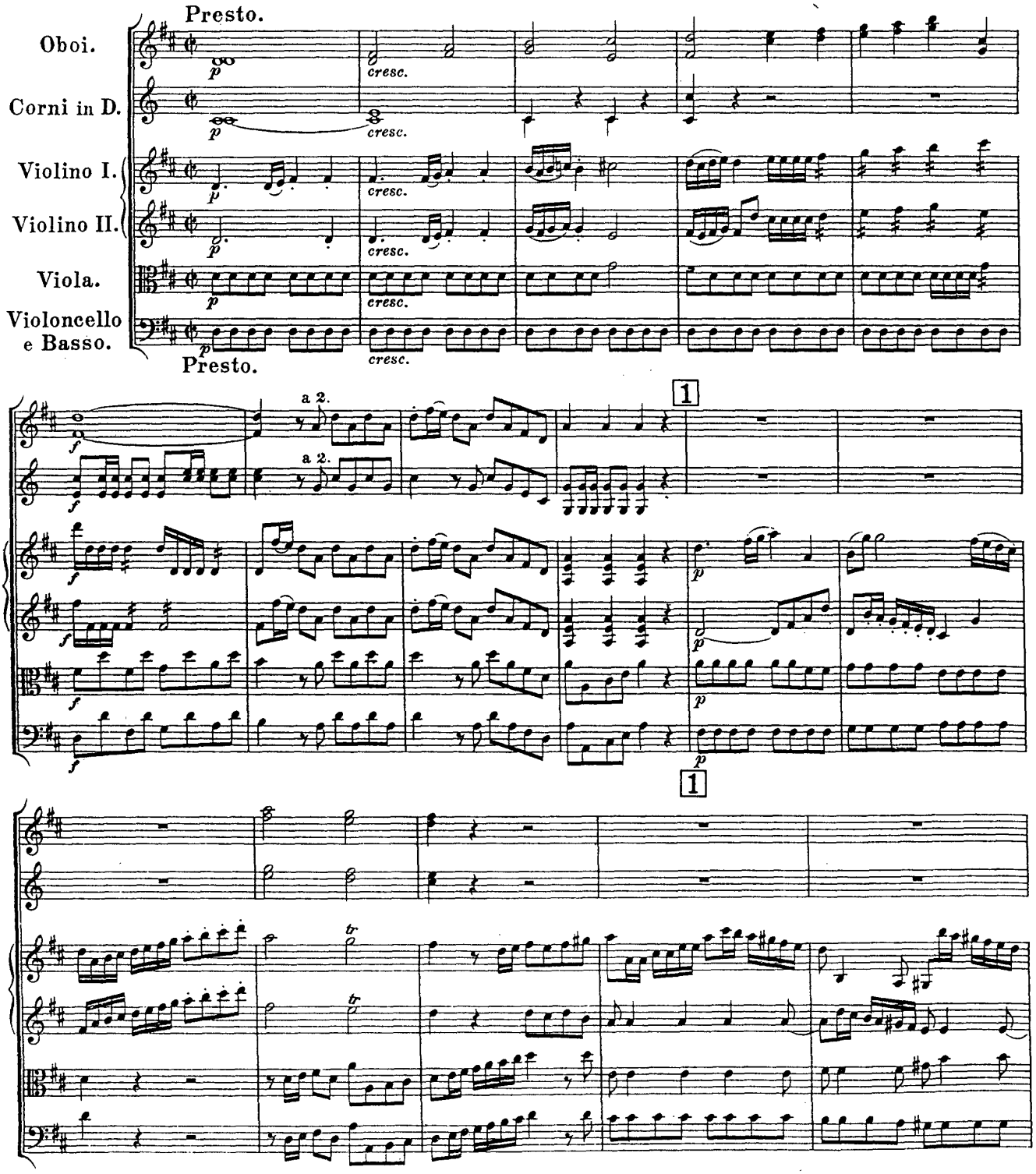
Haydns Werke

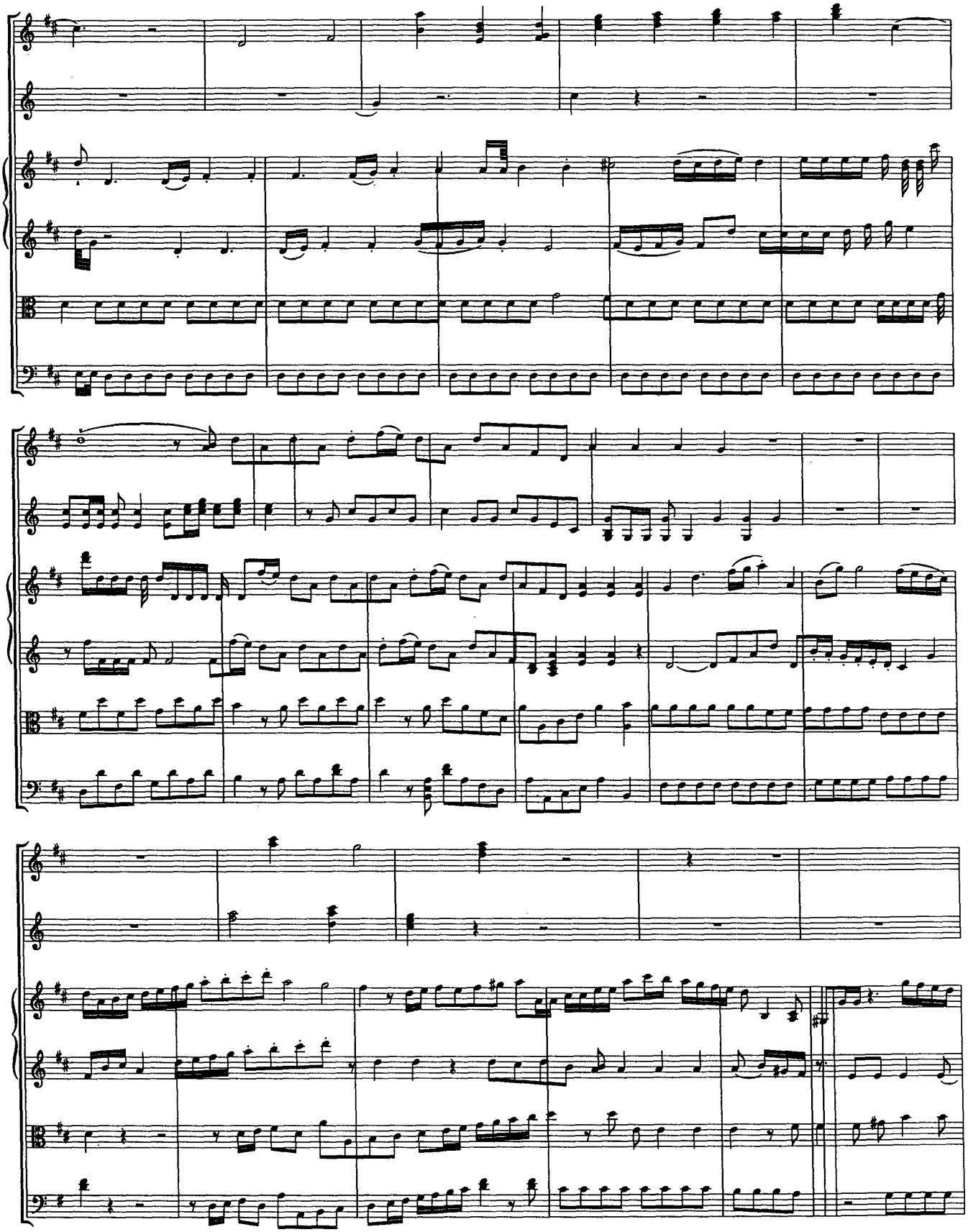
von

Serie 1 Nr. 1

Joseph Haydn

Komponiert 1759.





```
IN 1 0 0 .70

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3/M4/D3/E3/F3/G3/A3/B3/C4/
D4:F4/R/D4:F4/M4/C4/C4/C4/C4/C4/C4/C4/M4/
B3/B3/B3/A3/M4/M4/M4/R/G3/
G3/G3/G3/M4;
4/4/2/8/16/16/8/8/8/8/8/8/16/16/16/16/16/4/8/8/8/
8/8/8/8/8/8/8/8/
8/8/8/2/8/8/8/8;
;
2 3/4 5/6 9/10 12/13 16/19 22/23 26/27 30/31 34;
;
14 1 0 6 9
14 1 0 6
IN 2 0 0 .70

AL/K2S/D4/R/R/R/D4/E4/F4/D4/A4/A3/B3/C4/D4/E
4/F4/G4/A4/B4/C5/D5/R/D5/E4/
E4/E4/E4/R/F4/F4/F4/GS4/B4/B4;
4/4/2/8/16/16/8/8/8/8/8/8/8/16/16/16/16/16/4/8/8/8/
4/4/4/4/8/8/4/8/8/
4/8;
;
2 3/4 5/6 9/10 12/13 16;
;
IN 3 0 0 .70

TR/K2S/F4/B4/C5/A4/D5/E5/F5/G5/A5/B5/C6/D6/R/
D5/D5/R/D5/C5/D5/B4/B4:A4/
A4/A4/A4/A4/B4/GS4/F4/R/E4/E4/E4/E4;
16/16/16/4/16/16/16/16/8/8/8/8/8/4/4/4/8/8/8/8/4/4/4
/8/16/16/16/8./8/
8/4/8;
S 9/S 10/S 11/S 12;
1 3/5 8/9 12/15 18/24 26/27 28;
30 99/23 24;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/K2S/D5/A4/B4/C5/D5/E5/F5/G5/A5/B5/C6/D6/A
5/G5/F5/R/D5/E5/F5/E5/F5/GS5/
A5/A4/A4/C5/C5/E5/E5/A5/C6/B5/A5/G5/F5/E5/D5/
B3/C4:A3/GS3/G4/G4/R/G5/F5/
E5/D5;
16/16/16/16/16/16/16/16/8/8/8/8/2/2/4/8/16/16/8/8/8/8
/8/16/16/16/16/16/
16/8/16/16/16/16/16/16/8/4/8/8/16/16/4./16/16/16/16;
S 9/S 10/S 11/S 12;
1 4/5 8/9 12/16 17/18 21/22 24/25 28/29 31/32 35/39
41/42 45;
;
IN 5 0 0 .70

TR/RW/M2/F5:A5/D5:A5:C6/M2/C5:E5:G5/R/R/M2/
RW/M2/RW/M2;
1/2/4/4/4/2/1/1;
;
;
;
IN 6 0 0 .70

TR/K2S/RW/A5:C6/G5/D5:F5:A5/R/R/RW;
1/4/2/4/2/4/1;
;
;
;
IN 7 0 0 .70

BA/K2S/D3/D4/F3/D4/G3/D4/A3/D4/M4/B3/R/A3/D
4/A3/D4:F4/A3/M4/D4/R/B2:E3:A3/
D4:F4/A3/F3/D3/M4/A3/A2/C3/E3/A3/B2/M4/F3/F3/
F3/F3/F3/F3/F3/F3/M4/G3/G3/
G3/G3/A3/A3/A3/A3/M4;
8/8/8/8/8/8/8/8/4/8/8/8/8/8/8/4/8/8/8/8/8/8/8/8/8/4/4/
8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8/8;
;
1 4/5 8/11 14/17 20/21 24/27 30/31 34/35 38/39 42;
;
14 7 0 6 9
14 7 0 6
IN 8 0 0 .70

AL/K2S/F4/D5/F4/D5/G4/D5/A4/D5/B4/R/A4/D5/A4
/D5/A4/D5/R/A4/D5/A4/F4/D4/
A4/A3/C4/E4/A4/A3:B4/A4/A4/A4/A4/A4/A4/F4/F4/
G4/G4/G4/G4/E4/E4/E4/E4;
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8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8/8;
;
1 4/5 8/11 14/17 20/21 24/27 30/31 34/35 38/39 42;
;
IN 9 0 0 .70

TR/R/F5/F4/F4/F4/F4/F4/F5/E5/D5/A4/D5/A4/D5
/A4/D5/F5/E5/D5/A4/D5/A4/
F4/B3:D4/C4:A4:E4:A3/E4:A4/E4:A4/R/D4/D4/F4/A
4/D5/D4/B4/A4/G4/F4/E4/D4/
C4/G4;
8/16/16/16/16/8/2/8/16/16/8/8/8/8/8/8/16/16/8/8/8/8/
8/8/4/4/4/4/2/8/
8/8/8/8/16/16/16/16/16/16/4/4;
S 16/S 34/S 35/S 36/S 37/S 38/S 39;
1 4/7 9/10 11/12 15/16 18/19 20/21 24/29 32/33
35/36 39;
08 09/17 18/28 29;
14 9 0 2 8 0 -1
IN 10 0 0 .70

TR/K2S/D6:F6/D5/D5/D5/D5/D5/D4/D4/D4/D4/D4/
F5/E5/D5/A4/D5/A4/D5/A4/D5/
F5/E5/D5/A4/D5/A4/F4/D4/E4:A4/E4:A4/E4:A4/G4/
D5/F5/G5/A5/A4/B4/G5/G5/F5/
E5/D5/C5;
16/16/16/16/32/16/16/16/16/16/8/16/16/8/8/8/8/8/8/8/
16/16/8/8/8/8/8/8/
4/4/4/4/4./16/16/4/4/8/8/2/16/16/16/16;
S 20/S 36;
1 4/6 9/11 13/14 15/16 19/20 22/23 24/25 28/34
35/38 39/41 44;
12 13/21 22/34 36/38 39/41 44;
IN 11 0 0 .70

TR/E4:C5/E4:C5/E4:C5/E4:C5/E4:C5/E4:C5/E4:C5/C5:E5/
C5:E5:G5/C5:E5/C5:E5:G5/M2/
C5:E5/M2/R/G4/C5/G4/C5/G4/M2/C5/G4/G4/C5/G4/
E4/C4/M2/G4:G3:B3/G3/G3/G4:G3/
G3/G4/G4:G3/G4/M2/RW/M2/RW/M2;
8/16/16/8/4/8/16/16/8/8/4/8/8/8/8/8/8/4/8/8/8/8/8/8/1
6/16/8/4/4/4/4/
1/1;
;
1 3/6 8/9 10/13 16/18 19/20 23/24 26;
;
IN 12 0 0 .70

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/D5/A4/F4/D4/A4/A4/A4/G4/RW/
RW;
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HW 1/S 7;
3 6/7 9/10 11/12 15;
08 09/01 02/01 02;
IN 13 0 0 .70

BA/K2S/E3/E3/D3/D3/D3/D3/D3/D3/D3/M4/D3/
D3/D3/D3/D3/D3/D3/M4/D3/
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/8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8;
;
1 2/3 6/7 10/11 14/15 18/19 22/23 26/27 30/31 34/35
38/39 42;
;
14 13 0 6 9
14 13 0 6
IN 14 0 0 .70

AL/D4/D4/D4/D4/D4/D4/D4/D4/D4/D4/D4/D4/D4/D
4/D4/D4/D4/D4/D4/D4/D4/G4/F4/
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4/G4;
4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/2/8/8/8/8/8/
8/8/8/8/8/8/16/
16/16/16/32;
;
2 5/6 9/10 13/14 17/18 21/23 26/27 30/31 34/35 38;
;
IN 15 0 0 .70

TR/K2S/D5/G4/R/D4/D4/D4/E4/F4/F4/G4/F4/G4/A4/
G4/E4/F4/E4/F4/G4/F4/D5/C5/
C5/C5/C5/D5/F5/G5/E5;
128/32/2/4/4./16/16/4/4/16/16/16/4/2/16/16/16/16/
8/8/16/16/16/16/16/
16/16/4;
S 3/S 7/S 8/S 13;
1 2/5 6/9 12/15 18/19 20/21 24;
05 06/09 12/15 18;
14 15 0 2 8 0 -1
IN 16 0 0 .70

TR/K2S/D5:D5/D4/D4/E4/F4/F4/F4/F4/G4/A4/A4///
B4/B4/CS5/D5/C5/D5/E5/D5/
E5/E5/E5/E5/F5/B4:D5:B4:D5/B4:D5:B4:D5/C6;
8/4./16/16/4/4/4./16/16/4/4/16/128/4/4/2/16/16/16/16/
4/16/16/16/16/16/
32/32/16;
HW 1/S 5/S 6/S 10/S 15;
3 4/8 9/12 13/17 20/22 25;
03 04/08 09/17 20;
IN 17 0 0 .70

TR/R/M2/R/M2/G4/R/M2/C5/R/R/M2/RW/M2;
1/1/4/2./4/4/2/1;
;
;
99 01/99 01;
IN 18 0 0 .70

TR/K2S/C5/R/D4/F4/B4:A5/E4:B4:D5/F4:G4:D5/C5:
E5:G5/D5:F5:A5/E5:G5:B5/F5:A5/
G5:B5:D6/C5;
4./2/2/2/4/4/4/4/4/4/4/4/4;
;
;
99 01/99 01/12 99;
z
```

Symphonie Nr. 1

von

Joseph Haydn

Komponiert 1759.

Presto.

Oboi.

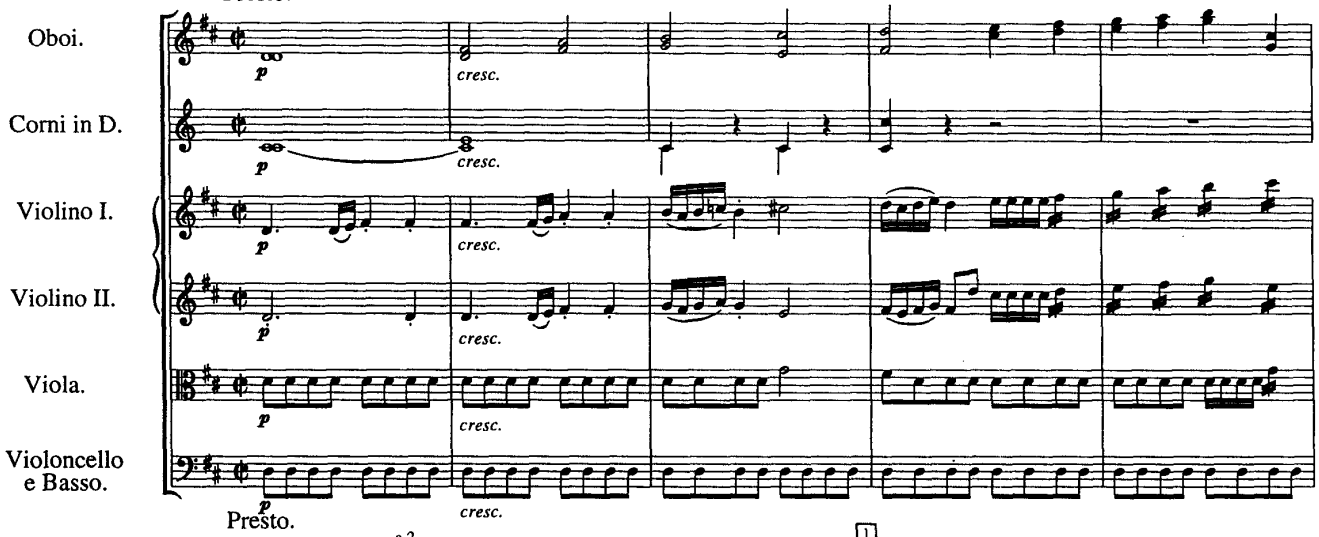
Corni in D.

Violino I.

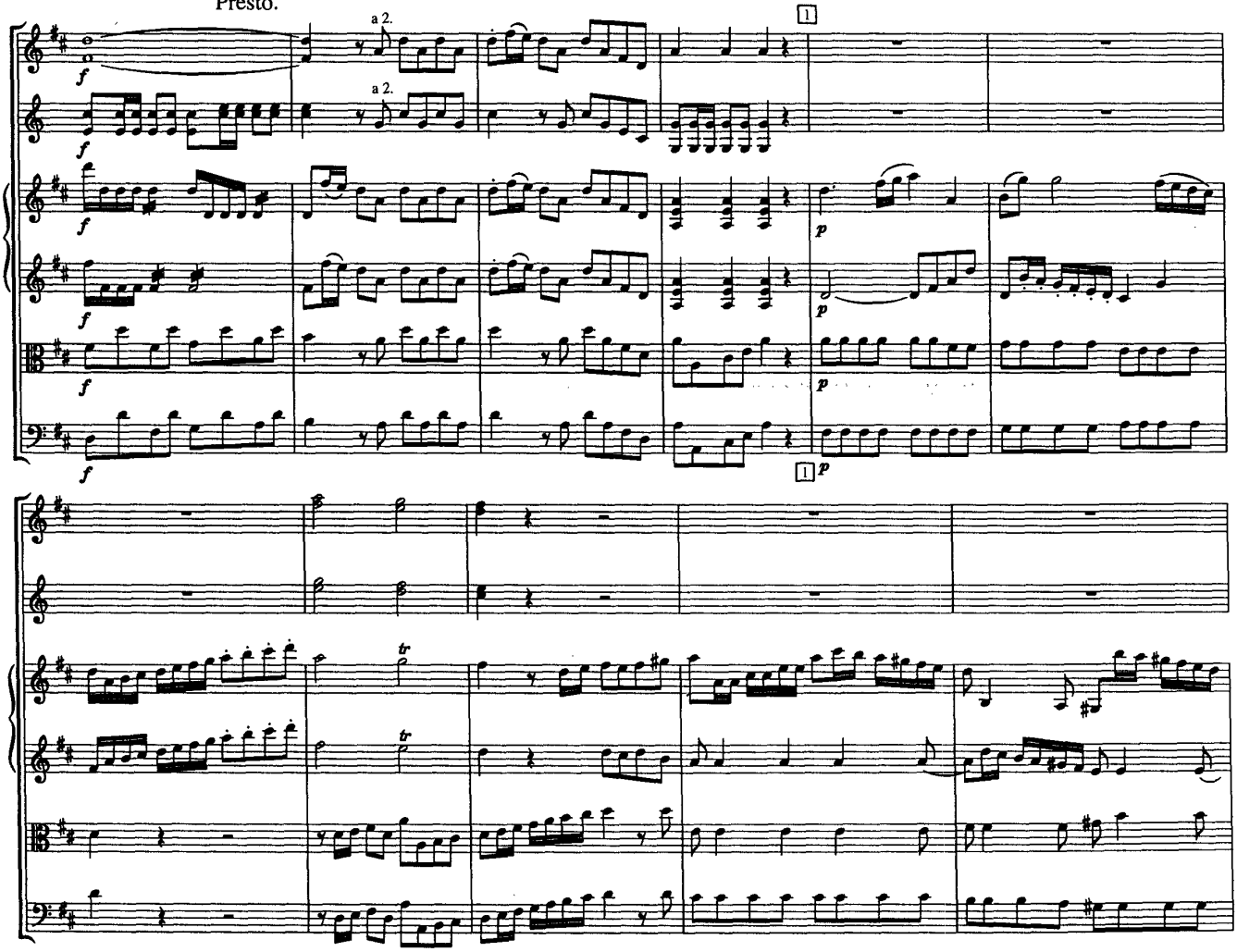
Violino II.

Viola.

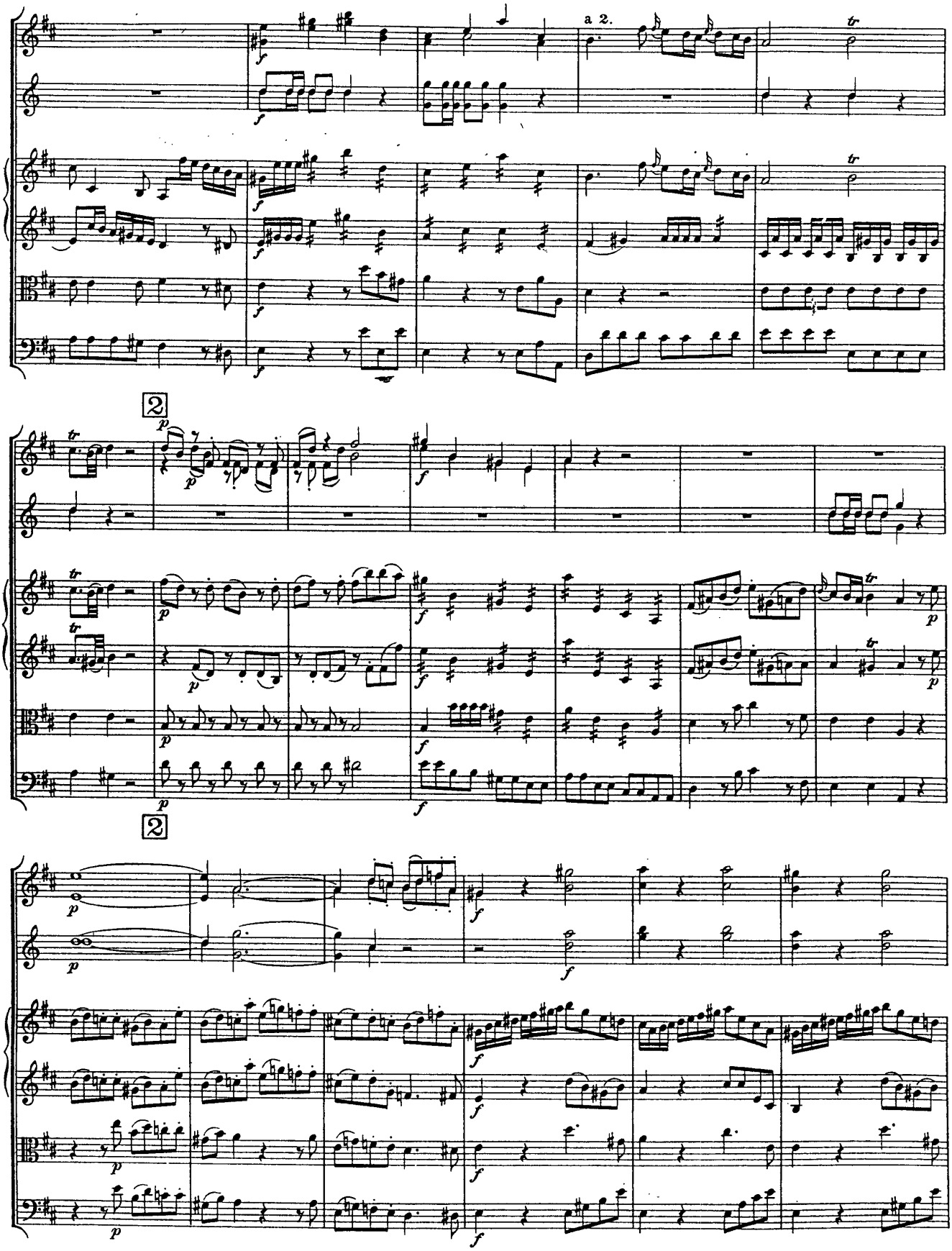
Violoncello e Basso.

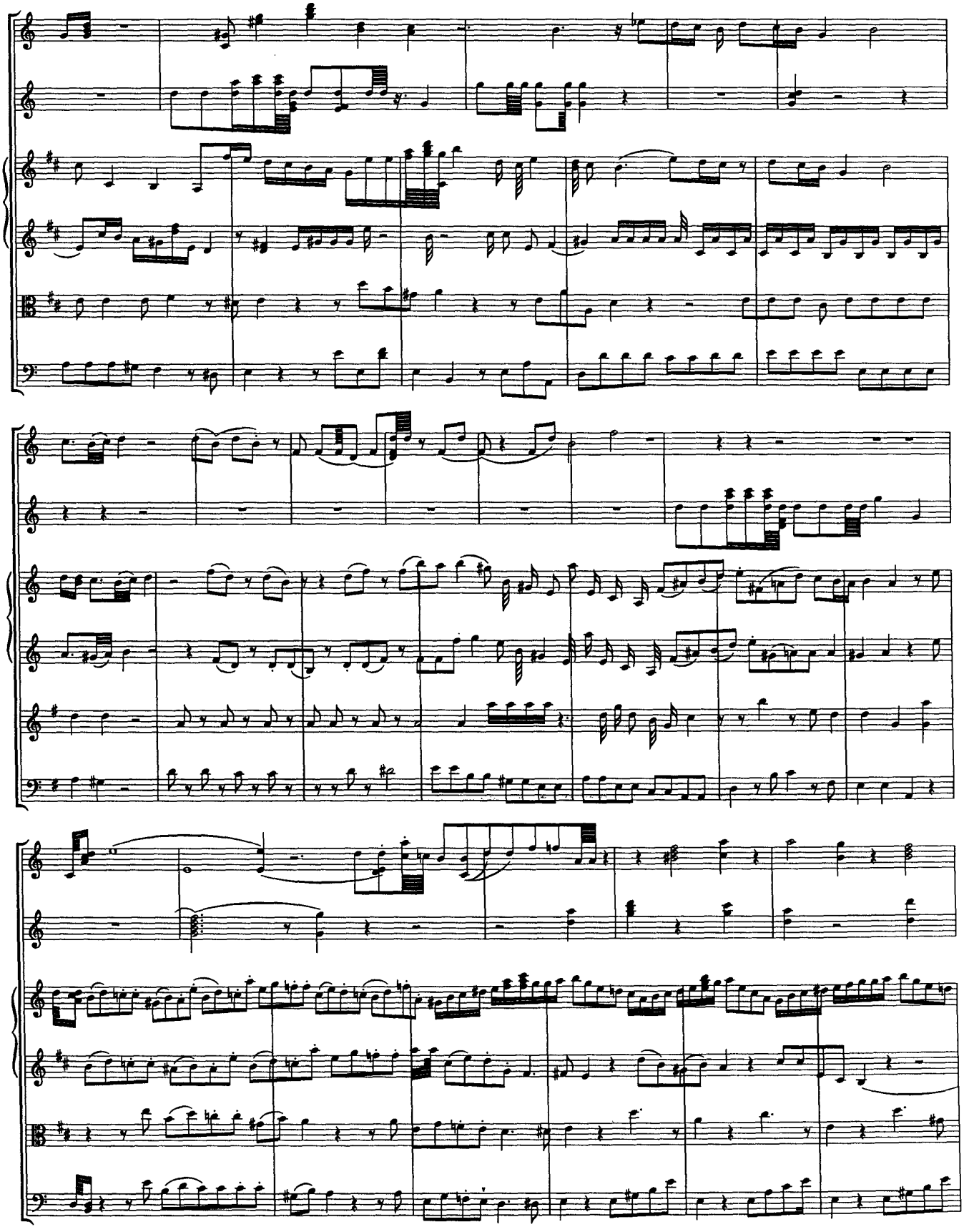


Presto.



Stich und Druck von Breitkopf & Härtel in Leipzig


a 2.
2
2



```
IN 1 0 0 .70

BA/D3/B2:D3/R/R/E4/B3/D4/C4/C4/C4/C4/M4/GS3/
B3/A3/R/R/A3/M4/E3/G3/FN3/
E3/D3/DS3/M4/E3/R/E3/GS3/B3/E4/M4/E3/R/E3/A3
/C4/E4/M4/E3/R/E3/GS3/B3/E4/
M4;
128/16/4/8/8/8/8/8/8/8/8/8/4/4/8/8/8/8/8/8/4./8/4/4/8
/8/8/8/4/4/8/8/
8/16/4/4/8/8/8/8;
S 8/S 9/S 16/HW 17;
1 2/4 9/10 11/14 17/21 24/26 29/31 34;
04 06/10 11;
14 1 0 6 9
14 1 0 6
IN 2 0 0 .70

AL/K2S/R/R/E5/B4/D5/CN5/C5/GS4/B4/A4/R/R/A4/
E4/G4/FN4/E4/D4/DS4/E4/R/D5/
R/A4/R/C5/R/E4/R/D5/GS4;
4/8/8/8/8/8/8/8/8/4/4/8/8/8/8/8/8/4./8/4/4/4./8/4/4/4./8/
4/4/4./8;
S 4/S 5/S 12/S 13;
2 5/6 7/10 13;
02 03/06 07;
IN 3 0 0 .70

TR/K2S/B4/D5/CN5/C5/AS4/B4/A4/E5/B4/D5/CN5/
A5/E5/G5/FN5/F5/A5/A5:A5/C5/
E5/D5/G4/F4/FS4/E4/R/D5/B4/GS4/B4/A4/R/C5/C5/
E4/C4/B3/R/R;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/32/128/8/8/8/8/4./8/4/4
/8/8/8/8/4/4/8/
8/8/8/4/4/2;
S 3/S 4/S 7/S 8/S 11/S 12/S 15/S 16/S 21/S 22;
1 4/5 8/9 12/13 16/17 18/19 22/26 29/31 34;
01 02/05 06/09 10/19 20/26 27/28 29/35 99/35 99;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/D5/A4:C5:D5/B4/D5/CN5/C5/GS4/B4/A4/E5/B4/
D5/CN5/A5/E5/G5/FN5/F5/C5/
E5/D5/CN5/B4/D5/FN5/A4/GS4/B4/C5/DS5/E5/F5:
A5/F5:A5:C6/G5/G5/A5/B5/G5/
E5/DN5/C5/A4/B4/C5/D5/E5/E5:G5:B5/G5/A5/E5/C
5/A4/G4/B4/C5/DS5/E5/F5/G5/
G5/A5/B5/G5/E5/DN5;
128/16/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
16/16/16/16/16/
16/16/16/16/16/8/8/8/8/16/16/16/16/16/16/16/8/8/8
/8/16/16/16/16/16/
16/16/16/16/8/8/8/8;
S 5/S 6/S 9/S 10/S 13/S 14/S 17/S 18/S 21/S 22/S
25/S 26;
1 2/3 6/7 10/11 14/15 18/19 22/23 26/27 30/31 36/37
40/41 44/45 48/49 52/
53 56/57 61/62 65;
03 04/07 08/10 12/19 20/22 24;
IN 5 0 0 .70

M2/TR/R/M2/G4:B4:D5:F5/R/G4:G5/R/R/M2/R/D5:
A5/M2/G5:B5:D6/R/G5:C6/M2/D5:A5/
R/D5:D6/M2;
1/2./8/4/4/2/2/4/4/4/4/4/2/4;
;
;
99 01/99 01/01 02/01 02;
IN 6 0 0 .70

TR/C4/A4:C5:D5/E5/E4/E4:E5/R/D5/E4:D4:D5/C5:
A5:A5/CN5/B4/C4:B4:C4/D5/D5/
F5/FN5/A4/A4/R/R/BS4:D5:F5/C5:A5/R/A5/B4:G5/
R/B4:D5:F5;
128/16/1/1/4/2./8/8/128/128/8/8/8/8/8/8/128/128/4/4/2
/4/4/2/4/4/2;
S 7/S 8/S 8;
1 2/6 9/10 17;
03 05/11 13/11 12/03 05/05 07;
IN 7 0 0 .70

BA/K1S/A3/GS3/R/M4/D4/R/D4/R/C4/R/C4/R/M4/R
/R/D4/R/DS4/M4/E4/E4/B3/B3/
GS3/G3/E3/E3/M4/A3/A3/E3/E3/C3/C3/A2/A2/M4/
D3/R/B3/C4/R/F3/M4/E3/E3/A2/
R/M4;
4/4/2/8/8/8/8/8/8/8/8/8/8/8/2/8/8/8/8/8/8/8/8/8/8/8/
8/8/8/8/4/8/8/
4/8/8/4/4/4/4;
;
9 12/13 16/17 20/21 24;
;
14 7 0 6 9
14 7 0 6
IN 8 0 0 .70

TR/K1S/D5/D5/R/A4/R/A4/R/A4/R/A4/A4/R/A4/R/
A4/A4/AS/A5/A5/A5/R/D5/G5/D5/
B4/G4/C5/R/R/B5/R/E5/D5/D5/G4/G4:A5;
4/4/2/8/8/8/8/8/8/8/8/8/8/2/4/16/16/16/16/4../32/16/8
/32/16/4/8/8/4/
8/8/4/4/4/4;
;
11 14;
;
IN 9 0 0 .70

TR/A4/GS4/A4/B4/R/R/F4/D4/R/D4/D4/B3/R/D4/D4
/F4/R/F4/F4/F5/G5/E5/B4/GS4/
E4/A5/E4/C4/A3/F4/AS4/B4/D5/E5/GS4/AN4/A4/A4
/GS4/A4/R/E5;
8/32/32/4/2/4/8/8/8/8/8/8/8/8/8/8/8/8/8/4/8/64/4/32/
16/16/16/32/8/8/
8/8/8/8/8/8/4/4/4/4/8;
S 7/S 10/S 13/S 29;
1 3/5 6/7 9/10 12/13 15/25 28/29 32;
02 03/05 06/08 09/11 12/25 26/27 28/30 31;
14 9 0 2 8 0 -1
IN 10 0 0 .70

TR/D5/B4:D5/C5/B4/C5/D5/R/F5/D5/R/D5/B4/R/R/
D5/F5/R/F5/B5/A5/B5/GS5/B4/
GS4/E4/A5/E4/C4/A3/F4/AS4/B4/D5/E5/FS4/AN4/D
5/C5/B4/A4/B4/A4/R/E5;
16/16/8./32/32/4/2/8/8/8/8/8/8/4/8/8/8/8/8/4/8/32/16/
8/8/8/16/16/16/8/
8/8/8/8/8/8/8/8/16/16/4/4/8/8;
S 29;
1 2/3 5/7 8/9 10/11 12/13 15/25 28/29 32/33 35;
04 05/07 08/09 10/11 12/13 14/16 15/25 26/27 28/30
32;
IN 11 0 0 .70

TR/R/R/R/M2/RW/M2/RW/M2/RW/M2/RW/M2/RW
/M2/D5/D5/D5:A5:C6/A5:C6/D5:A5:C6/
D4:F4:D5/D5/D5/D5/D5/G5/G4/M2;
4/4/2/1/1/1/1/1/8/8/16/16/128/128/8/8/128/128/4/4;
;
1 6/7 10;
;
IN 12 0 0 .70

TR/C5/B4/C5/D5/R/D5/B4/D5/B4/R/F4/F4/F4/D4/F4
/D4:F4:D5/D5/R/F4/D5/F4/R/
F4/D5/B4/F5/R/R/R/R/RW/RW;
8./32/32/4/2/8/8/8/8/8/8/128/8/8/128/128/8/8/8/8/4/8
/8/2/2/1/4/4/2/1/
1;
S 8;
1 3/5 6/7 8/10 12/13 15/16 17/19 20;
02 03/05 06/06 08/10 12/12 14/16 18/18 20;
IN 13 0 0 .70

BA/A3/A3/A3/GS3/F3/R/DS3/M4/E3/R/R/E4/E3/D4:
F4/M4/E3/B2/R/E3/A3/A2/M4/
D3/D4/D4/D4/C4/C4/D4/D4/M4/E4/E4/E4/E4/E3/E3/
E3/E3/M4;
8/8/8/8/4/8/8/4/4/8/8/8/8/4/4/8/8/8/8/8/8/8/8/8/8/8/
8/8/8/8/8/8/8;
;
1 4/8 10/13 15/16 19/20 23/24 27/28 31;
;
14 13 0 6 9
14 13 0 6
IN 14 0 0 .70

AL/K2S/E4/E4/E4/F4/R/DS4/E4/R/R/D5/B4/GS4/A4/
R/R/E4/A4/A3/D4/R/R/E4/E4/
E4/C4/E4/E4/E4/E4;
8/4/8/4/8/8/4/4/8/8/8/8/4/4/8/8/8/4/4/2/8/8/8/8/8/8/
8;
;
7 9/11 13/15 17/19 22;
;
IN 15 0 0 .70

TR/K2S/E4/C5/B4/A4/GS4/D5:F5/E4/D4/R/FS4:D4/
E4/GS4/G4/G4/E5/R/B4/R/C5/
C5/E4/F4/GS4/A4/A4/A4/A4/A4/C4/A4/C4/A4/C4/A
4/C4/A4/B3/G4/B3/G4/B3/G4/
B3/G4;
8/16/16/16/16/16/16/4/8/4/16/16/16/16/16/2/32/2/16/8
/8/4/4/16/16/16/16/
32/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16;
;
1 3/4 7/10 13/21 24/26 29/30 33/34 37/38 41;
99 01/19 20;
14 15 0 2 8 0 -1
IN 16 0 0 .70

TR/K2S/C5/C4/B3/A3/F5/E5/D5/C5/B4/A4/G4/E5/E
5/F5:A5/G5:B5:D6/G5:C4/B5/
D5/C5/E5/B4:D5/C5/B4/E5/D5/C5/R/D5/C5/B4/G4/
B4;
8/4/4/8/16/16/16/16/16/16/16/16/16/128/128/128/4/16
/64/4/32/8/4./8/16/
16/8/8/16/16/4/2;
;
4 6/7 10/11 16/24 26/27 29;
23 24;
IN 17 0 0 .70

TR/RW/M2/D5/D5/D5:A5/A5:C6/D5:A5:C6/E4:G4:
D5/D5/F4:E4:D5/D5/D5/R/G4/M2/
G5/G5/G5/G4:G5/G4:G5/G4:G5/R/M2/RW/M2/D5:G
4:C5/R/R/M2;
1/8/8/16/16/128/128/8/8/128/128/16./4/8/128/128/8/1
28/4/4/1/4/2/4;
;
1 6/7 10/12 14/15 16;
;
IN 18 0 0 .70

TR/G4/G4:B4:D5/R/GS4:C4/ES5:G5/G5:B5:D6:G5:
B5:D6/B4:D5/A4:C5/R/B4/R/EF5/
D5/C5/B4/D5/C5/B4/G4/B4;
16/16/1/8/4/4/4/4/2./4./16/8/16/16/16/8/8/16/16/4/2;
;
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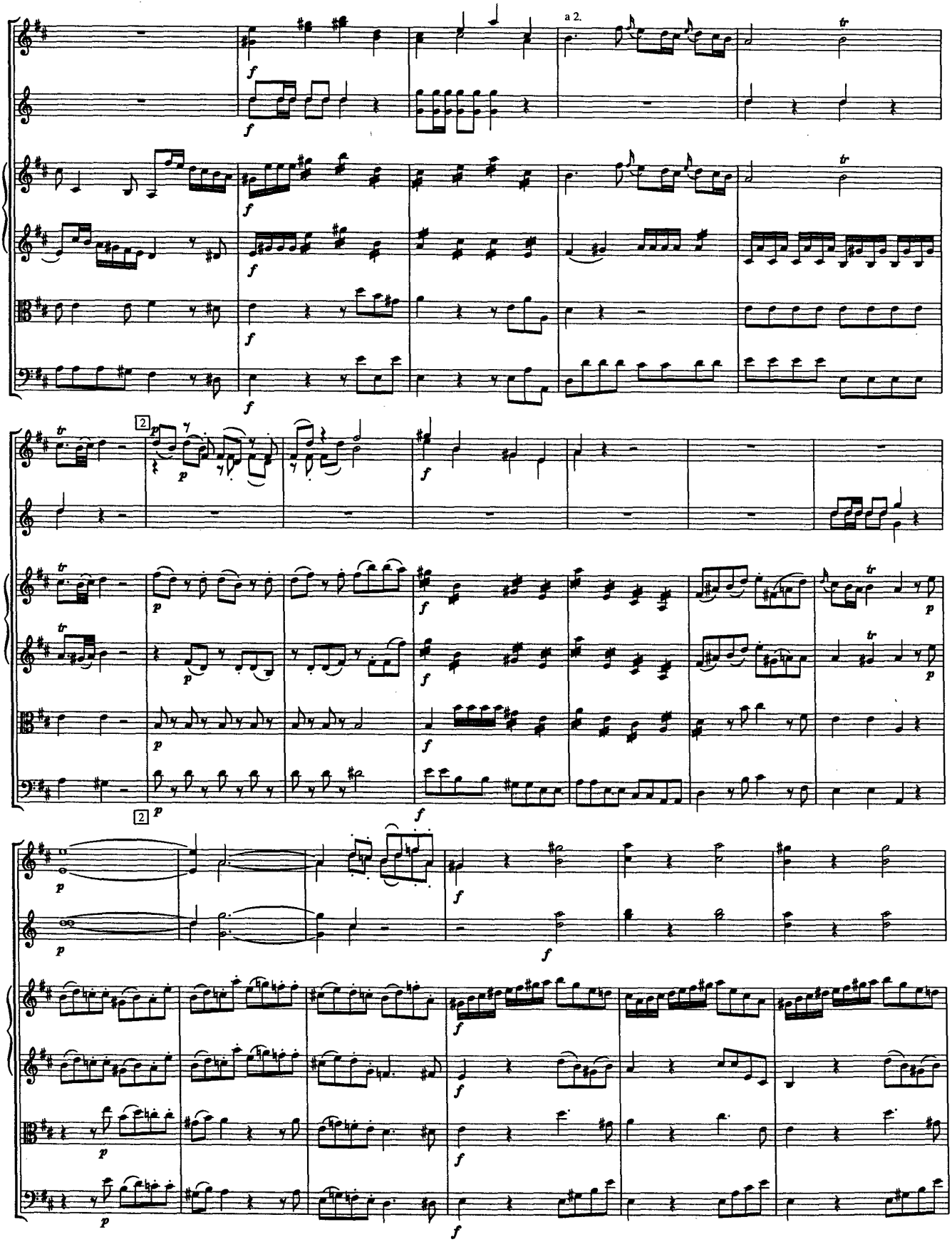
;
z
```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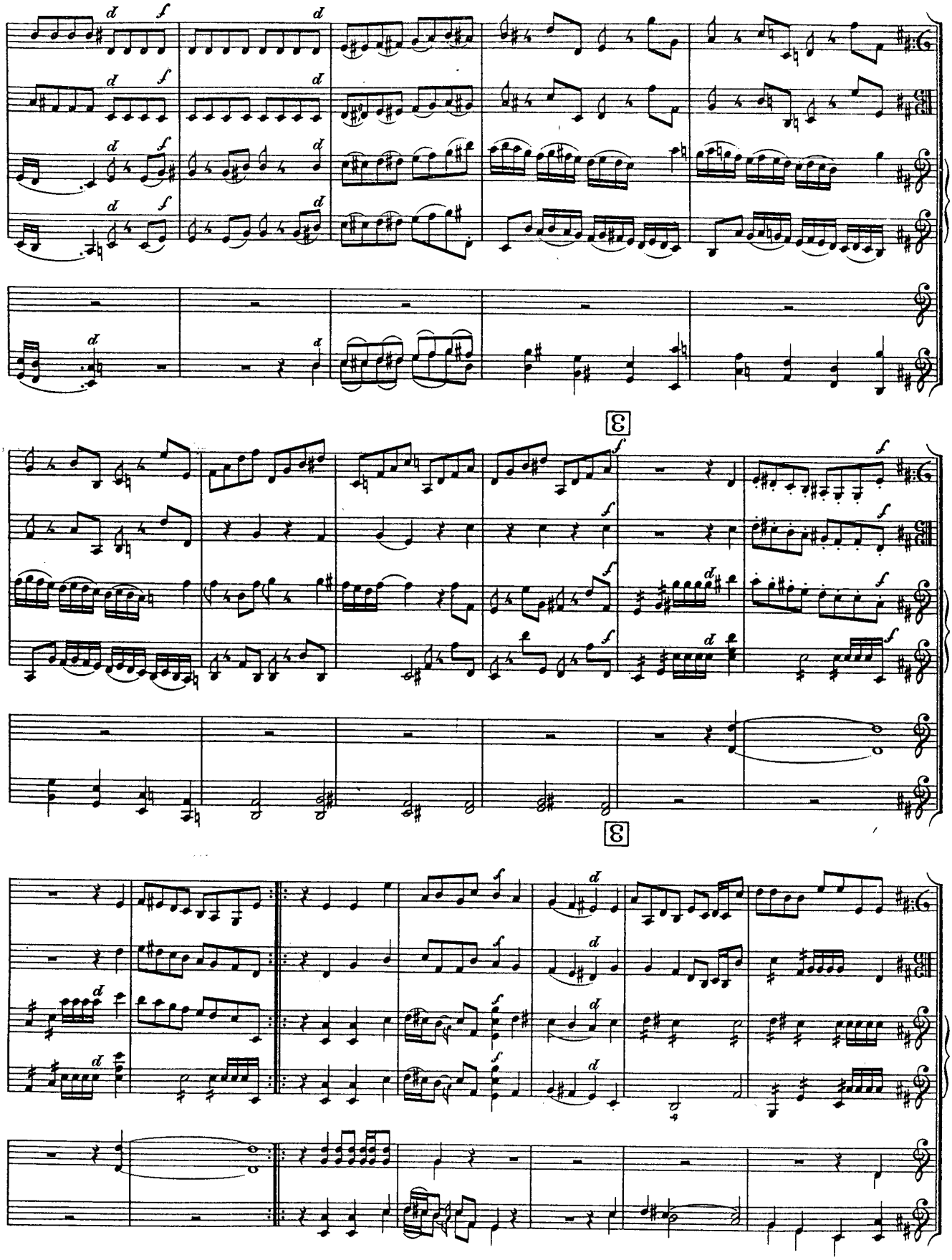

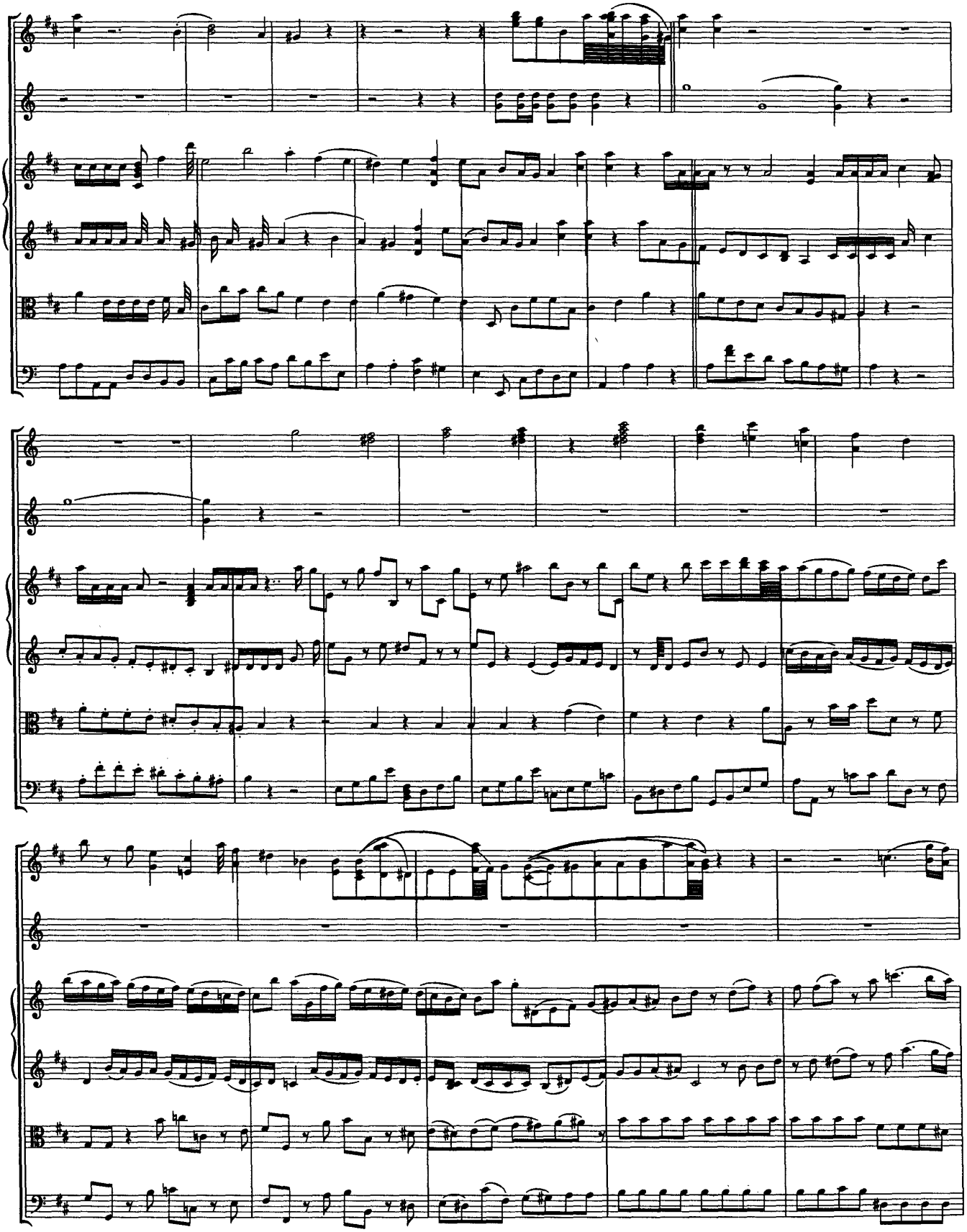

```
IN 1 0 0 .70

BA/K2S/G3/G2/R/B3/CN4/CN3/R/E3/M4/F3/F2/R/A
3/B3/B2/R/DS3/M4/E3/DS3/C4/
F3/G3/GS3/A3/A3/M4/B3/B3/B3/B3/B3/B3/B3/
M4/B3/B3/C4/B3/DS3/D3/D3/D3/
M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
8/8/8/8/8/8/8/
8/8/8/8/8;
;
1 2/4 5/7 8/10 11/13 16/17 20/21 24/25 28/29 32/33
36;
13 14/15 16/17 18;
14 1 0 6 9
14 1 0 6
IN 2 0 0 .70

AL/K2S/G3/G3/R/B4/CN5/CN4/R/E4/F4/F3/R/A4/B
4/B3/R/DS4/E4/DS4/E4/F4/G4/
GS4/A4/AS4/R/B4/B4/B4/B4/B4/B4/B4:B4/B4/B
4/B4/B4/F4/F4/F4/DS4;
8/8/4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
8/8/8/8/8/8/8/
8/8/8/8/8/8;
;
1 2/4 5/7 8/10 11/13 16/17 20/21 24/25 28/29 32/33
36;
13 14/15 16/16 18/19 20;
IN 3 0 0 .70

TR/K2S/D4/B4/A4/G4/A4/G4/F4/E4/F4/E4/D4/C4/D
4/CN4/A4/G4/F4/G4/F4/E4/D4/
E4/E4/C4:B3:D4/D4/C4/C4/C4/B3/DS4/E4/F4/G4/G4
/A4/AS4/C4/R/B4/B4/D5/R/D5/
DS5/F5/R/F5/A5/G5/F5;
4/16/16/16/16/16/16/16/16/16/16/16/4/16/16/16/16
/16/16/16/16/16/16/
16/16/16/16/8/8/8/8/8/8/8/8/2/8/8/8/8/8/8/8/8/4./16
/16;
S 22;
2 5/6 9/10 13/15 18/19 22/23 24/25 28/29 32/33
36/39 40/42 43/46 47;
02 03/06 09/10 12/15 18/25 28/29 30/31 32/35 36/42
43/45 47;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/B5/A5/G5/A5/G5/F5/E5/F5/E5/D5/CN5/D5/C5/B
5/A5/G4/F5/G5/F5/E5/DS5/E5/
D5/C5/B4/C5/B4/A5/G5/DS4/E4/F4/G4/GS4/A4/AS4
/B4/D5/R/D5/F5/R/F5/F5/A5/
R/A5/CN6/B5/A5;
16/16/16/16/16/16/16/16/16/16/16/8/8/16/16/16/16
/16/16/16/16/16/16/
16/16/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/8/8/8/8/4./16/1
6;
S 29;
1 4/5 8/9 12/13 14/15 18/19 22/23 26/27 28/29 32/33
36/37 38/39 40/42 43/
46 47;
01 04/05 08/09 12/15 18/19 22/23 26/30 32/33 34/35
36/39 40/42 43/45 47;
IN 5 0 0 .70

TR/RW/M2/RW/M2/RW/M2/RW/M2/RW/M2;
1/1/1/1/1;
;
;
;
IN 6 0 0 .70

TR/K2S/B5/R/G5/G4:E5/EN4:C5/A5/A4:F5/DS5/BF
4/E4:B4/C4:B4:E4:C4/D4:A5:G5/
DS4/E4/E4/F4:F5:A5:A5/F4/G4/C4:G4:C4/G4/GS4/
A4/A4/G4:B4/A5:A5/A4:A5:A5/
G4:B4/R/R/R/R/CN5/B4:G5/A4:F5;
8/8/8/4/4/32/4/4/4/8/8/8/8/8/8/128/128/8/8/8/8/8/8/8/8/
128/128/4/4/2/2/
4./16/16;
;
9 16/17 26/28 29;
10 12/10 16/18 19/18 25/18 26/25 26/27 29;
IN 7 0 0 .70

BA/K2S/A3/F4/F4/E4/DS4/C4/B3/AS3/M4/B3/R/R/
M4/E3/G3/B3/E4/B2:D3:F3/D3/
F3/B3/M4/E3/G3/B3/E4/CN3/E3/G3/CN4/M4/B2/DS
3/F3/B3/G2/B2/E3/G3/M4/A3/A2/
R/CN4/C4/D4/D3/R/F3/M4;
8/8/8/8/8/8/8/8/4/4/2/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8;
S 1/S 2/S 3/S 4/S 5/S 6/S 7/S 8;
1 4/5 8/10 13/14 17/18 21/22 25/26 29/30 33/34
35/36 37/38 39;
;
14 7 0 6 9
14 7 0 6
IN 8 0 0 .70

AL/K2S/A4/F4/F4/E4/DS4/C4/B3/AS3/B3/R/R/B3/R
/B3/B3/B3/R/G4/E4/F4/R/E4/
R/A4/A3/R/B4/B4/D5/D4/R/F4;
8/8/8/8/8/8/8/8/4/4/2/4/4/4/4/4/4/4/4/4/4/4/8/8/8/16/
16/8/8/8/8;
S 1/S 2/S 3/S 4/S 5/S 6/S 7/S 8;
1 4/5 8/18 19/20 21/22 23;
14 15;
IN 9 0 0 .70

TR/C5/A4/A4/G4/F4/E4/DS4/C4/B3/DS4/D4/D4/D4/
G4/F5/E5/G4/R/E5/DS5/F4/R/
R/E5/E4/R/E4/E4/G4/F4/E4/D4/R/D4/D4/E4/B4/R/E
4/E4/CN5/B4/A4/B4/A4/G4/F4/
G4/F4/E4/D4/E4;
8/8/8/8/8/8/8/8/4/4/16/16/16/16/8/16/8/8/8/8/8/8/8/8/8/
4/4/16/16/16/16/
4/8/128/8/8/8/8/8/4/16/16/16/16/16/16/16/16/16/16/16
/16;
S 1/S 2/S 3/S 4/S 5/S 6/S 7/S 8;
1 4/5 8/10 13/16 17/19 20/21 22/24 27/29 30/31
32/35 38/39 42/43 46;
23 24/35 38/39 42/43 46;
14 9 0 2 8 0 -1
IN 10 0 0 .70

TR/K2S/A5/A4/A4/A4/A4/R/F4:A4:B3:D4/A4/A4/A
4/A4/R/A5/G5/E4/R/G5/F5/B3/
R/A5/C4/G5/E4/R/E5/AS5/B5/B4/R/B5/C4/B5/E5/R/
B5/C6/C6/B5:D6/A5:C6:A5/A5/
A5/G5/F5/G5/F5/E5/D5/E5/D5/C6;
16/16/16/16/8/2/4/16/16/16/16/4./16/8/8/8/8/8/8/8/8/8
/8/8/8/8/2/8/8/8/
8/8/8/8/4/8/16/16/16/128/128/8/8/8/8/16/16/16/16/8/8;
;
1 4/7 10/12 13/15 16/17 18/19 20/23 24/25 26/27
28/30 38/39 42/43 44;
35 38/39 42;
IN 11 0 0 .70

TR/G5/M2/G4:G5/R/R/M2/RW/M2/RW/M2/RW/M2/
RW/M2;
1/4/4/2/1/1/1/1;
;
;
01 02/01 02;
IN 12 0 0 .70

TR/RW/RW/G5/DS5:F5/F5:A5/DS5:F5:A5/R/DS5:F
5:A5:C6/D5:F5:B5/EN5:C6/CN5:A5/
A4:F5/D5;
1/1/2/2/2/4/4/2/4/4/4/4/4;
;
;
;
IN 13 0 0 .70

BA/A3/A3/A2/A2/D3/D3/B2/B2/M4/C3/C4/B3/C4/A
3/D4/B3/E4/E3/M4/A3/A3/F3:C4/
GS3/M4/E3/E2/C3/F3/D3/E3/M4/A2/A3/A3/R/MD4/
A3/F4:A4/E4/D4/C4/B3/A3/GS3/
M4/A3/R/R/M4;
8/8/8/8/8/8/8/8/8/16/16/8/8/8/8/8/8/8/4/4/4/4/4/8/8/8/8/8
/4/4/4/4/8/8/8/
8/8/8/8/8/4/4/2;
S 19;
1 4/5 8/9 11/12 13/14 17/24 27/31 34/35 38;
;
14 13 0 6 9
14 13 0 6
IN 14 0 0 .70

AL/K2S/A4/E4/E4/E4/E4/F4/B3/C4/C5/B4/C5/A4/F4
/E4/E4/A4/GS4/F4/E4/D3:D3/
C4/F4/F4/B3/C4/E4/A4/R/A4/F4/E4/D4/C4/B3/A3/G
S3/A3/R/R;
4/16/16/16/16/16/32/8/16/16/8/8/4/4/4/4/4/4/4/8/8/8/8/
8/4/4/4/4/8/8/8/
8/8/8/8/8/4/4/2;
;
2 5/8 10/11 12/21 24/28 31/32 35;
16 18;
IN 15 0 0 .70

TR/K2S/A4/A4/A4/A4/A4/A4/GS4/B4/A4/GS4/A4/R
/B4/A4/GS4/D4:A4:F5/E5/A4/B4/
A4/G4/A4/C5:A5/C5:A5/R/A5/A4/G4/F4/E4/D4/C4/
B3:D4/A3/C4/C4/C4/C4/A4/C5;
16/16/16/16/32/16/16/16/16/32/4/4/4/4/4/4/8/8/8/16/1
6/4/4/4/4/8/8/8/8/
8/8/8/8/4/16/16/16/16/16/4;
;
1 4/16 17/18 20/24 27/28 31/33 36;
11 13/17 18;
14 15 0 2 8 0 -1
IN 16 0 0 .70

TR/K2S/C5/C5/C5/C5/B4:D5:C4:G4:B4:D5/F5/D6/E
5/B5/A5/F5/E5/DS5/E5/D4:A4:F5/
E5/A4/B4/A4/G4/A4/C5:A5/C5:A5/R/A5/A4/A4/A4/
R/R/A4/E4:A4/A4/A4/A4/A4/C5/
F4:A4:F4:G4;
16/16/16/16/8/4/32/2/2/4/4/4/4/4/4/8/8/8/16/16/4/4/4/4
/16/16/16/16/8/8/
2/4/16/16/16/16/4/8;
S 10;
1 4/16 17/18 20/24 27/30 33;
11 13;
IN 17 0 0 .70

TR/R/RW/M2/RW/M2/RW/M2/R/R/R/M2/G4:D5/G4
:D5/G4:D5/G4:D5/G4:D5/G4:D5/R/
M2/MD2/G5/G4/G4:G5/R/R/M2;
2/1/1/1/2/4/4/8/16/16/8/8/4/4/1/1/4/4/2;
;
1 3/4 5;
08 09/08 09;
IN 18 0 0 .70

TR/K2S/C5:A5/R/B4/B4:D5/A4/GS4/R/R/R/R/R/E5:
G5:B5/E5:G5/B4/A5/A4:G5:B5:A5/
A5/G4:F5:A5:A5/GS4/C5:A5/C5:A5/R/RW/RW;
4/2./4/2/4/4/4/4/2/4/4/8/8/8/128/128/128/128/128/4/4/
2/1/1;
S 2;
6 13;
02 03/10 13;
z
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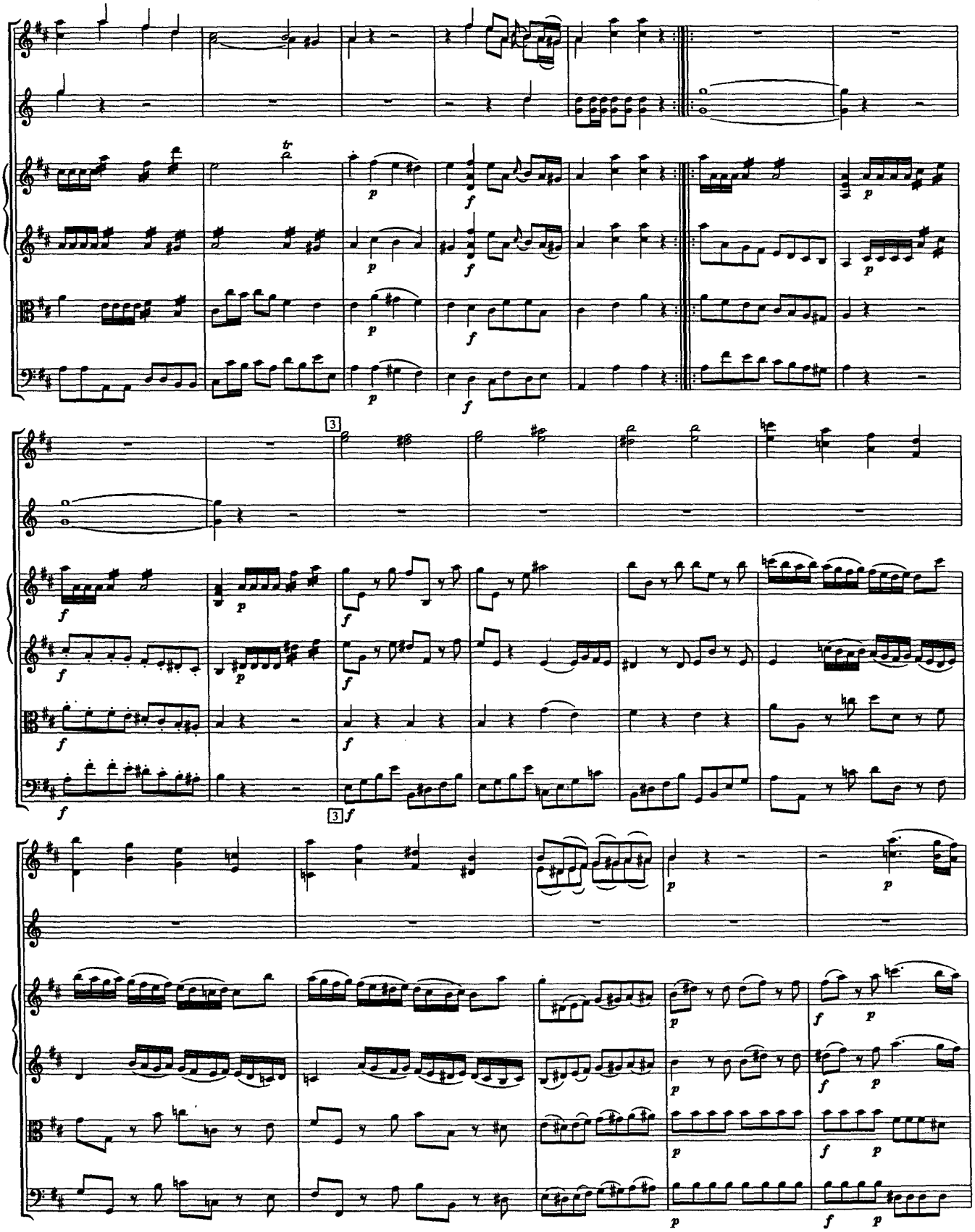

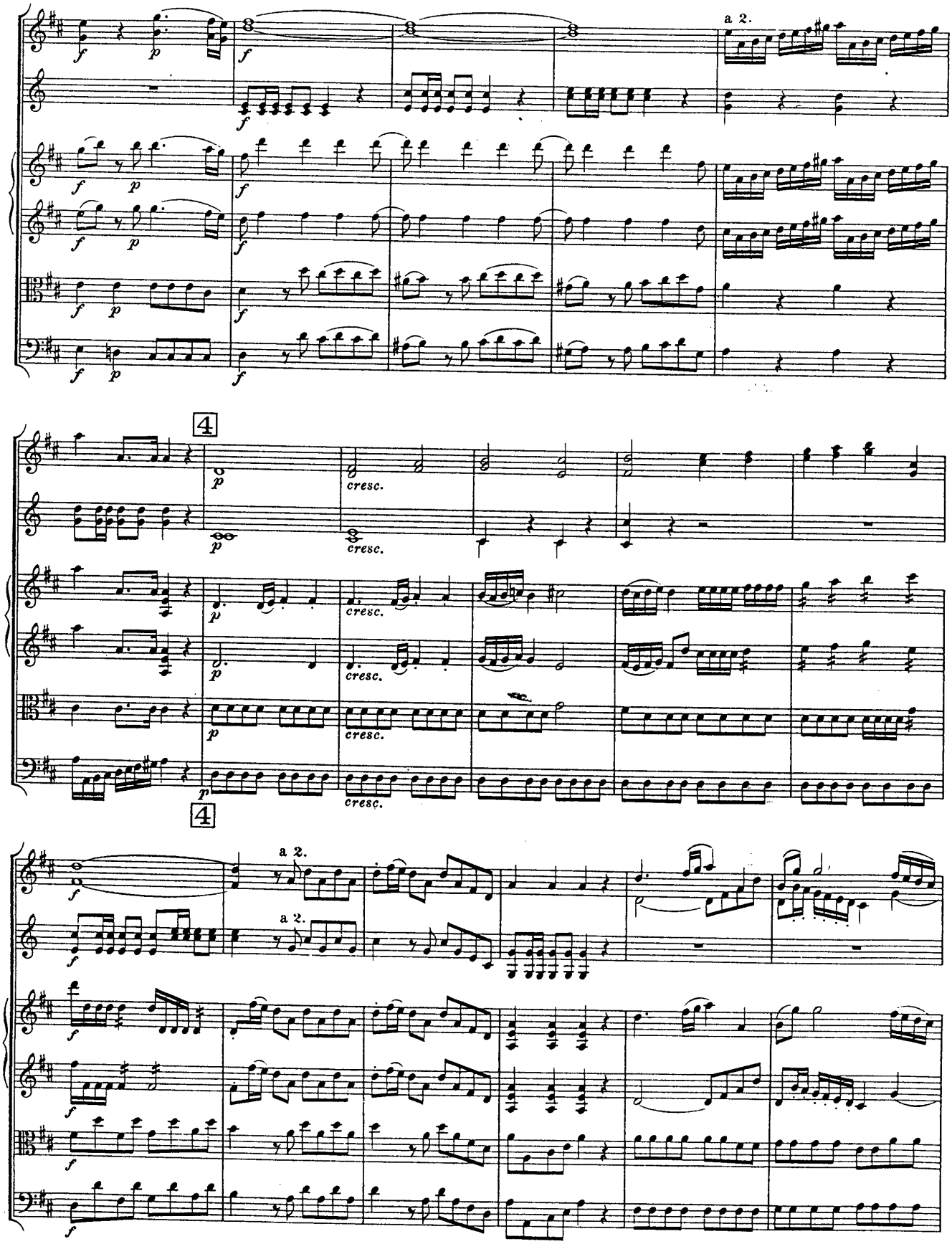
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cresc.
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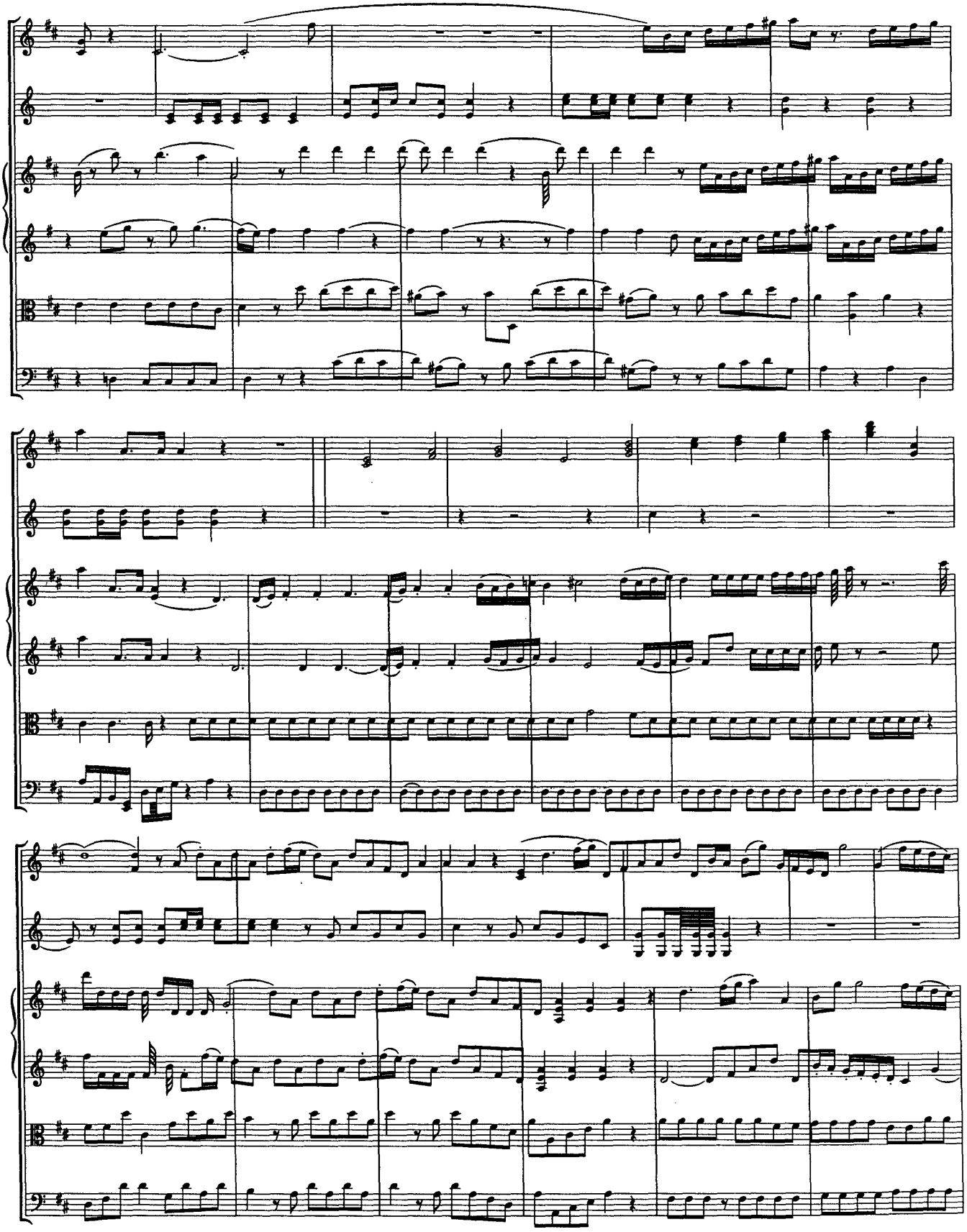
a 2.
a 2.



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IN 1 0 0 .70

BA/K2S/D3/F3/D4/D4/G3/D4/A3/D4/M4/B3/R/A3/D
4/A3/D4/A3/M4/D4/R/A3/D4/A3/
F3/D3/M4/A3/A2/C3/E3/A3/R/M4/F3/F3/F3/R/F3/F3
/F3/F3/M4/G3/G3/G3/G3/A3/
A3/A3/A3/M4;
8/8/8/4/8/8/8/8/4/8/8/8/8/8/8/4/8/8/8/8/8/8/8/8/8/4/4/
8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8/8/8;
;
1 3/5 8/11 14/17 20/21 24/26 28/29 32/33 36/37 40;
;
14 1 0 6 9
14 1 0 6
IN 2 0 0 .70

AL/K2S/F4/F4/D5/C4/G4/D5/A4/D5/B4/R/A4/D5/A4
/D5/A4/D5/R/A4/D5/A4/F4/D4/
A4/A3/C4/E4/A4/R/A4/A4/A4/A4/A4/A4/F4/F4/G4/
G4/G4/G4/E4/E4/A4/A4;
8/8/8/4/8/8/8/8/4/8/8/8/8/8/8/8/4/8/8/8/8/8/8/8/8/8/4/4/
8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8/8;
;
1 3/5 8/11 14/17 20/21 24/26 29/30 33/34 37/38 41;
;
IN 3 0 0 .70

TR/K2S/F5/F4/F4/F4/F4/B4/F4/F5/E5/D5/A4/D5/A4/
D5/A4/D5/F5/E5/D5/A4/D5/
A4/F4/D4/A4:E4:A3/E4:A4/E4:A4/R/D4/D4/F4/A4/
D5/D4/B4/A4/G4/F4/E4/D4/C4/
G4;
16/16/16/16/64/32/8/16/16/8/8/8/8/8/8/16/16/8/8/8/8
/8/8/4/4/4/4/2/8/
8/8/8/8/16/16/16/16/16/16/4/4;
S 7/S 16/S 34/S 35/S 36/S 37/S 38/S 39;
1 4/7 9/10 11/12 15/16 18/19 20/21 24/29 32/33
35/36 39;
08 09/17 18/28 29/41 99;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/K2S/D6/D5/D5/D5/D5/D5/D4/D4/D4/G4/D5/A4/
D5/A4/D5/D5/F5/E5/D5/A4/D5/
A4/F4/D4/A4:E4:A3/E4:A4/E4:A4/R/D5/F5/G5/A5/
A4/B4/G5/G5/F5/E5/D5/C5;
16/16/16/16/32/16/16/16/16/2/8/8/8/8/8/8/16/16/8/8/8/
8/8/8/4/4/4/4/4./
16/16/4/4/8/8/2/16/16/16/16;
S 10/S 16;
1 4/6 8/11 12/13 15/16 18/19 20/21 24/29 30/33
34/36 39;
10 11/17 18/29 31/37 39;
IN 5 0 0 .70

TR/E4/R/E4:C5/E4:C5/E4:C5/C5:E5/C5:E5/C5:E5/M
2/C5:E5/C5:E5/R/G4/C5/G4/
C5/G4/M2/C5/R/G4/C5/G4/E4/C4/M2/G4:G3/G4:G3/
G3/G4:G3/G4:G3/G4:G3/R/M2/
RW/M2/RW/M2;
8/8/8/8/8/16/16/8/8/4/8/8/8/8/8/8/4/8/8/8/8/8/8/16/12
8/128/128/4/4/1/
1;
;
2 3/4 6/7 8/11 14/17 20/21 25;
99 01;
IN 6 0 0 .70

TR/K2S/D5/F4:D5/R/A4/D5/A4/D5/A4/D5/F5/E5/D5
/A4/D5/A4/F4/D4/A4/A4/A4/R/
E4:C4/D5/F5/G5/D4/F4/A4/A4/D5/D4/B4/A4/B4/G5/
G4/F4/E4/D4/G5/G4/F5/E5/D5/
C5;
1/4/8/8/8/8/8/8/8/16/16/8/8/8/8/8/8/4/4/4/4/4/4./16/16/
8/8/8/8/8/8/16/
16/8/8/16/16/16/16/2/4/16/16/16/16;
S 4/S 8;
4 7/8 10/11 12/13 16/22 23/24 28/29 31/32 33/34
37/40 43;
99 01/03 04/09 11/20 23/22 24/32 31/39 43/39 43/01
02/01 02;
IN 7 0 0 .70

BA/K2S/A3/A2/B2/E2:G2/D3/E3/G3/R/A3/R/M4/D3
/D3/D3/D3/D3/D3/D3/D3/M4/D3/
D3/D3/D3/D3/D3/D3/D3/D3/M4/D3/D3/D3/D3/D3/D3/D
3/D3/M4/D3/D3/D3/D3/D3/D3/D3/
D3/M4/D3/D3/D3/D3/D3/D3/D3/D3/M4;
16/16/16/16/16/128/16/4/4/4/8/8/8/8/8/8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8/
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4;
;
1 4/5 7/9 12/13 16/17 20/21 24/25 28/29 32/33 36/37
40/41 44/45 47;
17 18;
14 7 0 6 9
14 7 0 6
IN 8 0 0 .70

AL/K2S/C4/C4/C4/R/D4/D4/D4/D4/D4/D4/D4/D4/D
4/D4/D4/D4/D4/D4/D4/D4/D4/D4/
D4/D4/G4/F4/D4/D4/D4/D4/D4/D4/D4/D4/D4/D
4/D4/D4/D4/D4/R;
4/4./16/4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/2/8/8/
8/8/8/8/8/8/8/
8/8/8/16/16/16/16/4;
;
4 7/8 11/12 15/16 19/20 23/25 28/29 32/33 36/37 40;
;
IN 9 0 0 .70

TR/K2S/A5/A4/A4/A4/R/D4/D4/D4/E4/F4/F4/G4
/F4/G4/A4/G4/E4/F4/E4/F4/G4/
F4/D5/C5/C5/C5/C5/D5/E5/R/R/E5;
4/8./16/4/4/2./4/4./16/16/4/4/16/16/16/16/4/2/16/16/16
/16/8/8/16/16/16/
16/16/8/8/2/8;
S 10/S 11;
2 3/8 9/12 15/18 21/22 23/24 27;
07 08/08 09/12 15/18 21;
14 9 0 2 8 0 -1
IN 10 0 0 .70

TR/K2S/A5/A4/A4/E4:A4/R/D4/D4/E4/F4/F4/F4/F4/
G4/A4/A4/B4/A4/B4/CN5/B4/
CS5/D5/C5/D5/E5/D5/E5/E5/E5/E5/F5/F5/F5/G5/
A5/R/R/C6;
4/8./16/4/4/4./16/16/4/4/4./16/16/4/4/16/16/16/16/4/2/
16/16/16/16/4/16/
16/16/16/16/16/16/16/64/32/8/2./32;
S 8/S 9/S 13/S 14;
2 3/6 7/11 12/15 18/21 24/26 29/30 33;
04 05/06 07/11 12/15 17/21 24;
IN 11 0 0 .70

TR/G4:D5/G4:D5/G4:D5/G4:D5/G4:D5/G4:D5/R/M2
/M2/R/M2/R/R/R/M2/C5/R/R/M2/
RW/M2;
8/16/16/8/8/4/4/1/4/2/4/4/4/2/1;
;
1 3/4 5;
;
IN 12 0 0 .70

TR/K2S/A5/A4/A4/A4/R/R/C4:E4/F4:A4/G4:B4/E4/
G4:B4:D5/C5:E5/D5:F5/E5:G5/
F5:A5/G5:B5:D6/G4:C5;
4/8./16/4/4/4/1/2/2/2/2/2/4/4/4/4/4/4;
;
2 3;
;
IN 13 0 0 .70

BA/K2S/R/DN3/C3/C3/C3/C3/M4/D3/R/R/C4/D4/C4
/M4/D4/AS3/B3/R/B3/C4/D4/C4/
M4/D4/GS3/A3/R/R/B3/C4/D4/G3/M4/A3/R/A3/D3/
M4;
4/4/8/8/8/8/4/8/4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
8/4/4/4/4;
;
2 5/7 10/11 12/14 17/18 19/20 23;
07 10/11 12/14 17/18 19;
14 13 0 6 9
14 13 0 6
IN 14 0 0 .70

AL/K2S/E4/E4/E4/E4/E4/C4/D4/R/D5/C5/D5/C5/D5/
AS4/B4/R/B4/D3/C5/D5/C5/D5/
GS4/A4/R/A4/B4/C5/D5/G4/A4/A3:B4/A4/R;
4/4/8/8/8/8/4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
8/8/4/4/4/4;
;
3 6/9 12/13 14/15 16/17 20/21 22/24 27;
09 12/13 14/17 20/21 22;
IN 15 0 0 .70

TR/K1S/R/E5/G5/R/G5/G5/F5/E5/F5/F5/F5/R/F5/F5/
R/R/R/F5/F5/F5/D5/C5/A4/
B4/C5/D5/E5/F5/GS5/A5/A4/B4/C5/D5/E5/F5/G5;
4/8/8/8/8/4./16/16/4/4/4/4/4/4/8/4./8/4/4/4/8/16/16/
16/16/16/16/16/
16/16/16/16/16/16/16/16;
;
1 2/5 6/16 19/20 23/24 27/28 31;
01 03/04 05/05 06/09 10/11 12;
14 15 0 2 8 0 -1
IN 16 0 0 .70

TR/K2S/B4/R/B5/R/B5/A5/A4/R/D6/D6/D6/D6/D6/
D6/D6/R/B4/D6/D6/D6/D6/R/E5/
A4/B4/C5/D5/E5/F5/GS5/A5/A4/B4/C5/D5/E5/F5/G
5;
16/8/8/8/4./4/2/8/4/4/4/8/8/4/4/4/64/8/4/4/4/8/16/16/16
/16/16/16/16/16/
16/16/16/16/16/16/16/16;
;
18 21/22 25/26 29/30 33;
01 02/03 05/09 10/12 14;
IN 17 0 0 .70

TR/RW/M2/C4:E4/C4:E4/C4:E4/C4:E4/C4:E4/C4:E4
/M2/E4:C5/E4:C5/C5/C5/E4:C5/
E4:C5/R/M2/C5:E5/C5:E5/C5:E5/C5:E5/C5:E
5/R/M2/G4:D5/R/G4:D5/R/M2;
1/8/16/16/8/8/4/8/16/16/8/8/4/4/8/16/16/8/8/4/4/4/4/
4;
;
1 3/4 5/7 9/10 11/13 15/16 17;
;
IN 18 0 0 .70

TR/K2S/G4:C4:C4/R/C4/C4/F5/R/R/R/E5/B4/C5/D5/
E5/F5/GS5/A5/C5/R/D5/E5/F5/
G5;
8/4/2./2/8/1/1/1/16/16/16/16/16/16/16/16/8./16/16/
16/16;
S 3;
5 7/8 11/12 13/14 17;
02 03/03 05/03 05/03 05/03 05/03 05;
z
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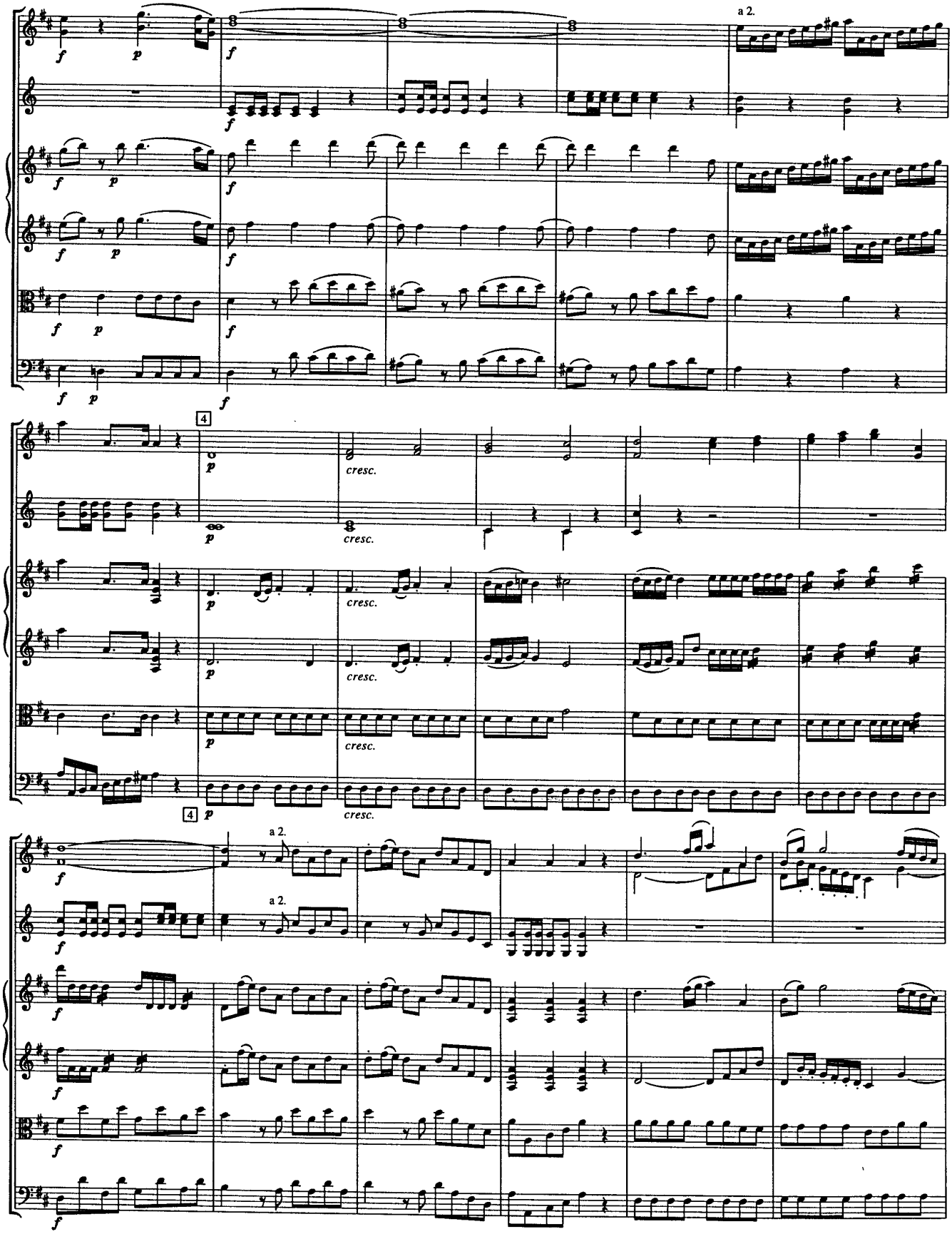
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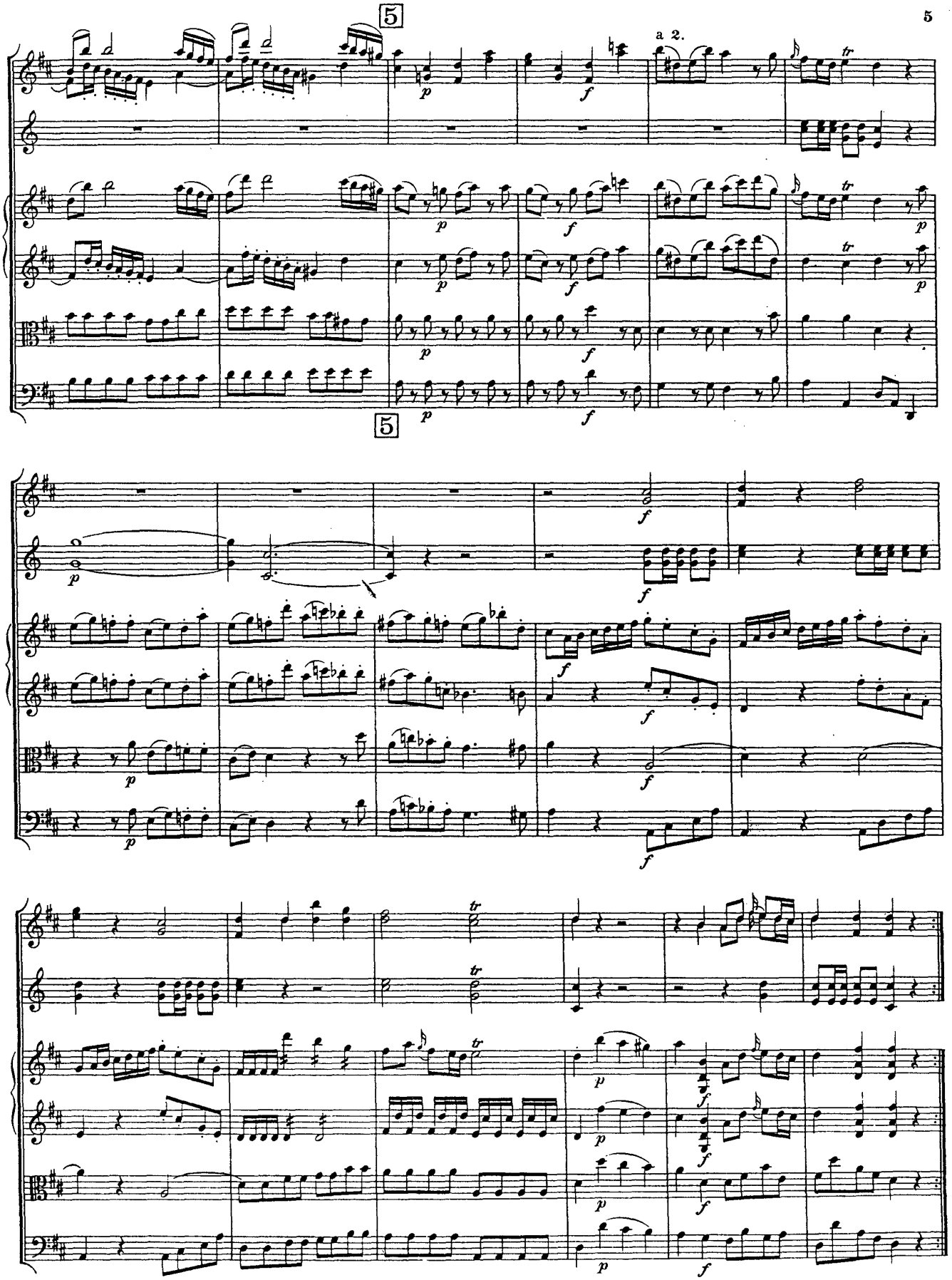
a 2.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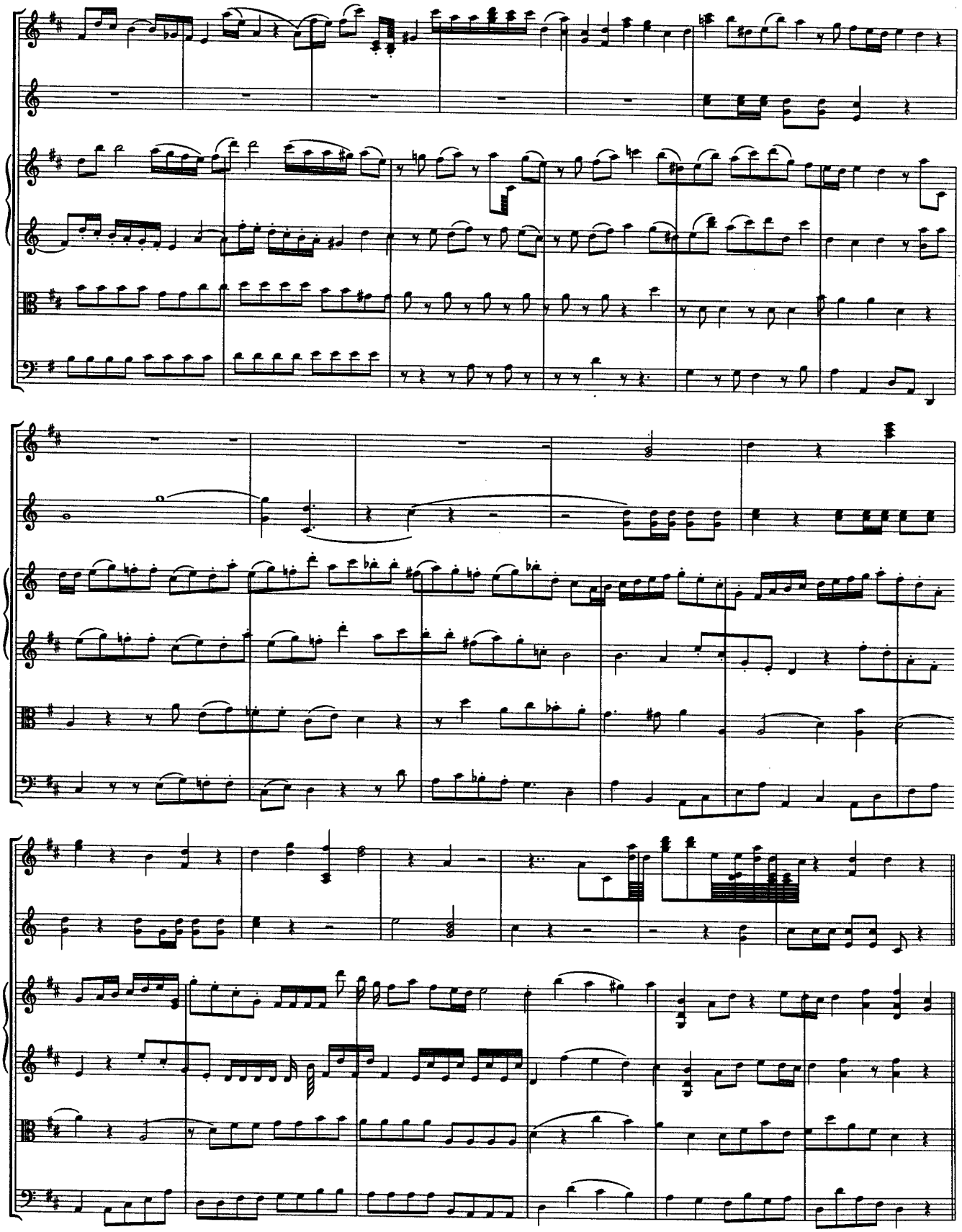

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B3/B3/M4/A3/A3/A3/A3/B2/A2/
A2/A2/M4/D3/D4/C4/B3/M4/A3/G3/F3/B3/G3/A3/M
4/D3/D4/A3/F3/D3/R/MD4;
4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/4/4/4/4/4/8/
8/8/8/8/8/8/8/
4/4;
;
2 5/6 9/10 13/14 17/18 21/28 31/32 35;
23 25;
14 1 0 6 9
14 1 0 6
IN 2 0 0 .70

AL/K2S/A4/R/A3/R/D4/F4/F4/G4/G4/B4/B4/A4/A4/
A4/A4/A3/A3/A3/A3/D4/R/C5/
B4/A4/D4/D4/F4/B4/E4/F4/D5/A4/F4/D4/R;
4/4/2/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/4/4/4/4/4/8/8/
8/8/8/8/8/4/4;
;
3 5/6 9/10 13/14 17/23 26/27 30;
99 01/18 20/02 03;
IN 3 0 0 .70

TR/K2S/E4/R/E5/C5/G4/E4/D4/D4/D4/D4/D4/B4/F4/
D5/F4/D5/F4/E4/C5/E4/C5/E4/
C5/E4/C5/D4/F5/E5/D5/C5/B4:D4:G3/A4/D5/E5/D5/
C5/D5/A4:F5/R/A4:F5/R;
4/4/8/8/8/8/16/16/16/16/16/64/16/16/16/16/4/16/16/16
/16/16/16/16/16/4/
4/4/4/4/4/8/8/8/16/16/4/4/8/4/4;
S 2/S 3/S 5;
2 5/6 9/12 15/17 20/21 24/31 32/33 35;
26 28;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/K2S/G4/A4/B4/C5/D5/E5/E4:G4/G5/E5/C5/G4/F
4/F4/F4/F4/D6/B5/G5/F5/A5/
F5/E5/D5/E5/D5/B5/A5/GS5/A5/B4:D4:G3/A4/D5/R
/E5/D5/C5/D5/A4:F5/D4:A4:F5/
G4:C5;
8/16/16/16/16/16/16/8/8/8/8/16/16/16/16/8/16/16/8/8/
8/16/16/2/4/4/4/4/
4/4/8/8/4/8/16/16/4/4/4/4;
S 8/S 9/S 10/S 11/S 25;
1 3/4 7/8 11/12 15/19 20/21 23/31 32/33 35;
26 28;
IN 5 0 0 .70

TR/G4:D5/R/G4:D5/G4/G4:D5/G4:D5/G4:D5/M2/C5
:E5/R/R/M2/E5/G4:B4:D5/M2/C5/
R/R/M2/R/R/G4:D5/M2/C5/C5/C5/E4:C5/E4:C5/C4/
R/MD2;
4/4/8/16/16/8/8/4/4/2/2/2/4/4/2/2/4/4/8/16/16/8/8/8/4;
;
2 4/5 6/12 14/15 16;
;
IN 6 0 0 .70

TR/K2S/E5:G5/R/B4/F4:D5/R/D5/D5:G5/F5:C4:A3/
D5:F5/R/A4/R/R/A4/C4:C4/D5:A5:A5/
D5/G5:B5:D6/B5:D6/E5/E4:D4:E5/D5:A5:A5/D5:E4:
C4/E4:C4/C5/R/F4:D5/D5/R;
4/4/4/4/4/4/4/4/2/4/4/2/4../8/8/128/128/8/8/128/128/12
8/128/128/128/4/
4/4/4;
;
9 12/13 20;
;
IN 7 0 0 .70

BA/K2S/C3/R/R/E3/G3/FN3/F3/M4/C3/E3/D3/R/R/D
4/M4/A3/C4/BF3/A3/G3/D3/M4/
A3/B2/A2/C3/M4/E3/A3/A2/C3/A2/D3/M4/F3/A3;
4/8/8/8/8/8/8/8/8/4/4/8/8/8/8/8/8/4./4/4/4/8/8/8/4/4/8
/8/8/8;
S 4/S 5/S 12/S 13;
2 5/6 7/10 13/18 21/24 27;
02 03/06 07;
14 7 0 6 9
14 7 0 6
IN 8 0 0 .70

AL/K1S/A3/R/R/A4/E4/G4/FN4/F4/C4/E4/D4/R/R/D
5/A4/C5/BF4/A4/G4/GS4/A4/A3/
A3/D4/A3:B4/D4;
4/4/8/8/8/8/8/8/8/8/4/4/8/4/8/8/8/4./8/4/4/2/4/4/2;
S 5/S 6/S 13/S 14;
3 6/7 8/11 14;
03 04/07 08/19 20/22 99;
IN 9 0 0 .70

TR/K2S/E5/G5/FN5/F5/C5/E5/D5/A5/E5/G5/FN5/D6
/A5/C6/B5/B5/FS5/A5/G5/CN5/
B4/B4/A4/E5/C5/G4/E4/D4/R/F5/D5/A4/F4;
8/8/8/8/8/8/8/8/8/8/8/8/4/8/8/8/8/8/8/8/8/2/4./4/8/8/8/4
/4/8/8/8/8;
S 3/S 4/S 7/S 8/S 11/S 12/S 15/S 16/S 19/S 20/S
24/S 25/S 26/S 27/S 29/
S 30/S 31/S 32;
1 4/5 8/9 11/13 16/17 20/24 27/29 32;
01 02/05 06/09 10/17 18;
14 9 0 2 8 0 -1
IN 10 0 0 .70

TR/D5/D5/E5/G5/FN5/F5/C5/E5/D5/A5/E5/G5/FN5/
D6/A5/C6/BF5/B5/FS5/A5/G5/
FN5/E5/G5/BF5/D5/C5/A4/B4/C5/D5/E5/F5/G5/E5/
C5/G4/F4/A4/B4/C5/D5/E5/F5/
G5/A5/F5/D5/A4;
16/16/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8
/16/16/16/16/16/
16/8/8/8/8/16/16/16/16/16/16/16/8/8/8/8;
S 5/S 6/S 9/S 10/S 13/S 14/S 17/S 18/S 21/S 22/S
25/S 26/S 34/S 35/S 36/
S 37/S 46/S 47/S 48/S 49;
1 2/3 6/7 10/11 14/15 18/19 22/23 26/27 29/30 33/34
37/38 41/42 45/46 49;
03 04/07 08/11 12/19 20/23 24;
IN 11 0 0 .70

TR/G4/G5/M2/G4:G5/D5:C4/M2/R/C5/R/R/M2/R/G4
:D5/G4:D5/G4:D5/G4:D5/G4:D5/
M2/C5:E5/R/C5:E5/C5:E5/C5:E5/C5:E5/C5:E5/M2;
1/1/4/4./4/4/4/2/2/8/16/16/8/8/4/4/8/16/16/8/8;
;
6 8/9 10/12 14/15 16;
02 03/04 05/04 05/05 06/02 03/04 05;
IN 12 0 0 .70

TR/K2S/RW/RW/RW/R/G4:B4/D5/R/A5:C6:E6;
1/1/1/2/2/4/4/4;
;
;
;
IN 13 0 0 .70

BA/K1N/B3/B3/B3/B3/C4/C4/C4/C4/M4/D4/D4/D4/
D4/E4/E4/E4/E4/M4/R/R/R/A3/
R/A3/R/M4/R/R/D4/R/R/M4/G3/R/G3/F3/R/B3/M4/
A3/A2/D3/A2/D2/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/8/8/8/8/8/8/8/4/8/4.
/4/8/8/4/8/8/4/
4/8/8/4;
;
1 4/5 8/9 12/13 16/26 27;
;
14 13 0 6 9
14 13 0 6
IN 14 0 0 .70

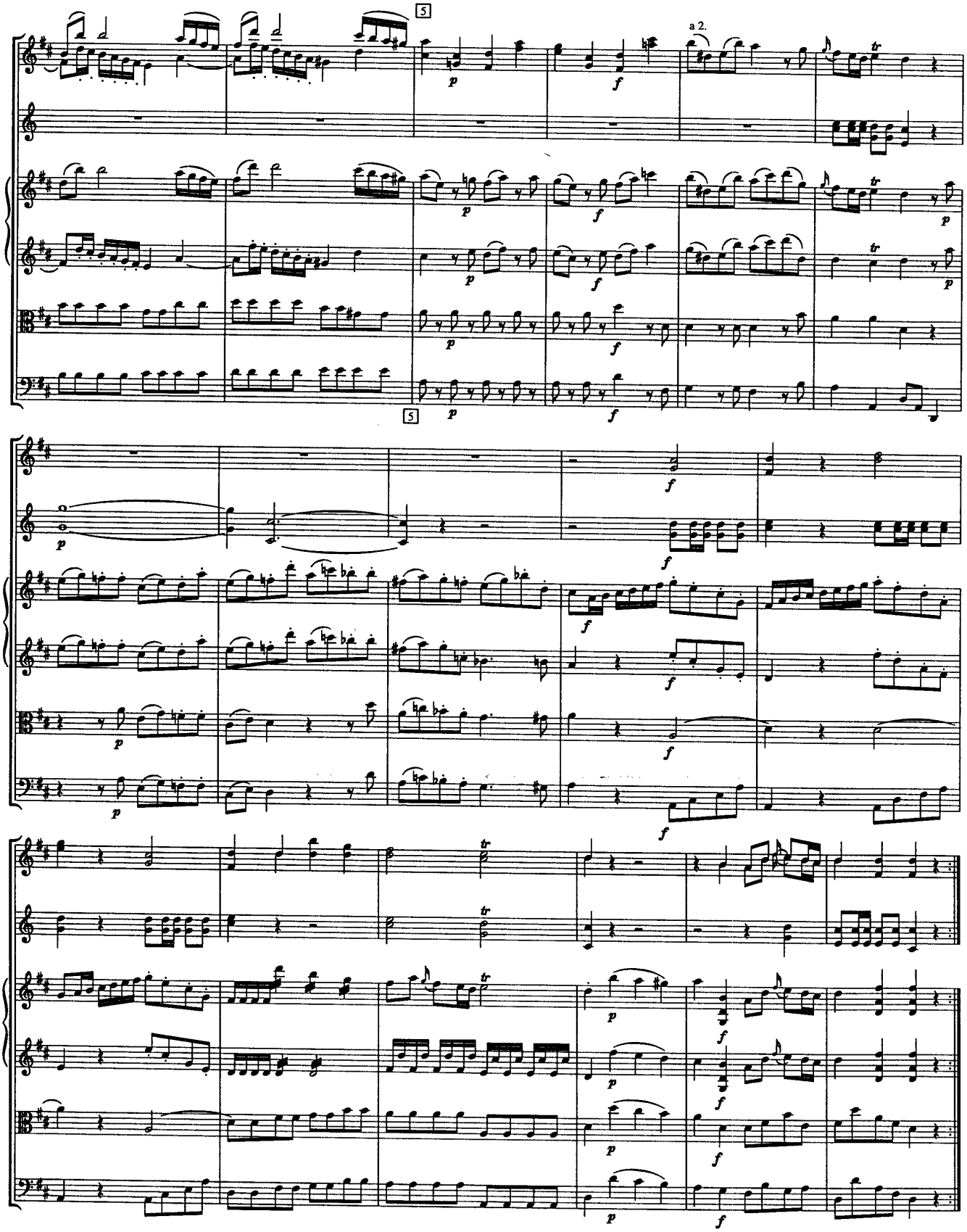
AL/K2S/B4/B4/B4/B4/G4/G4/C5/C5/D5/D5/D5/D5/
B4/B4/GS4/G4/A4/R/A4/R/A4/R/
A4/R/A4/R/A4/R/D5/R/D4/D4/R/D4/D4/B4/A4/A4/D
4/R;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/
4/8/8/4/8/8/4/
8/4/4/4/4;
;
1 4/5 8/9 12/13 16;
;
IN 15 0 0 .70

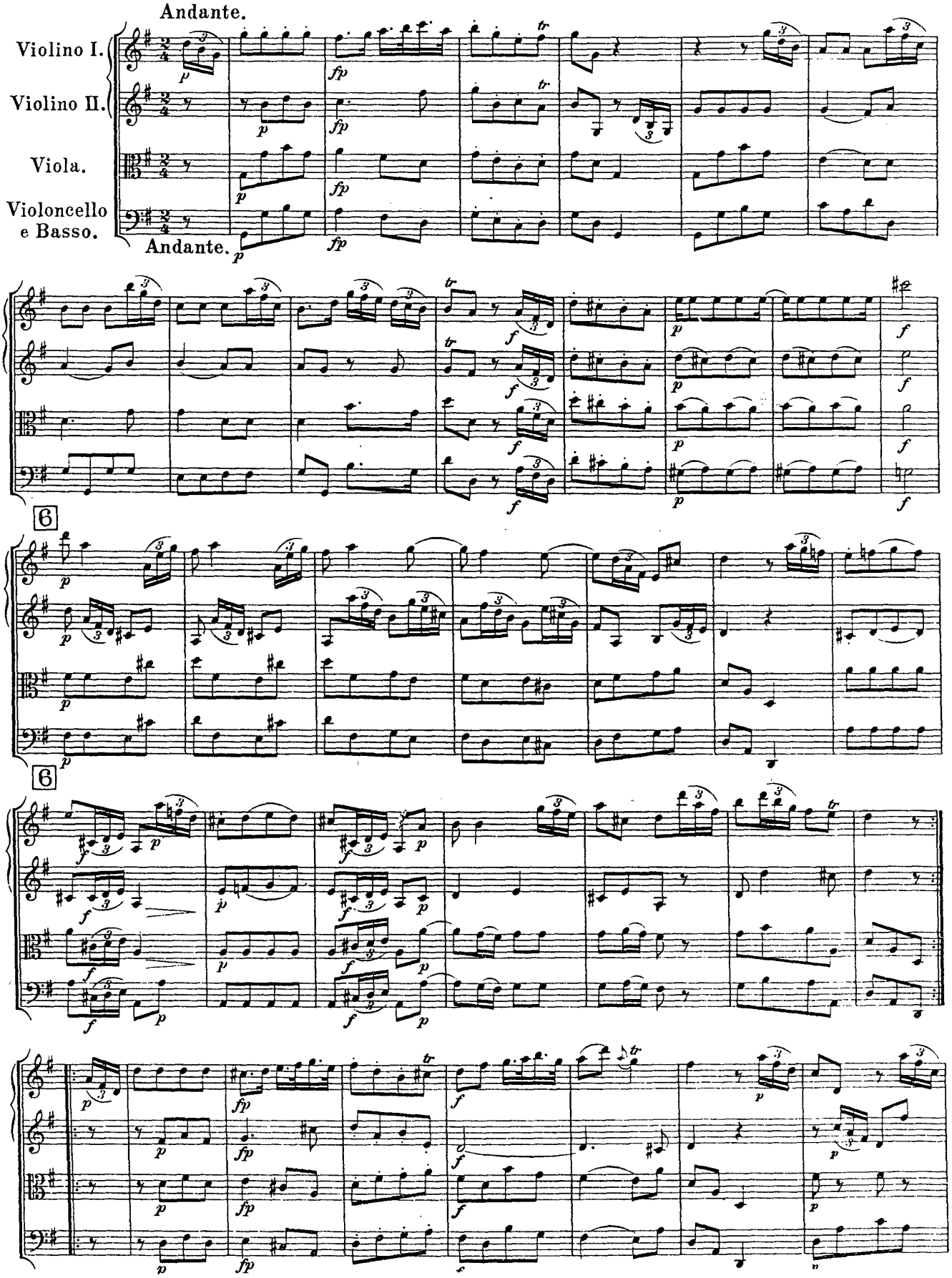
TR/F4/D5/C5/B4/A4/G4/F4/E4/A4/A4/F5/E5/D5/C5/
B4/A4/GS4/D5/C5/R/E5/D5/F5/
R/F5/E5/C5/R/E5/D5/F5/A5/G5/DS5/E5/B5:D6/A5/C
6/D6/D5/C6/D5/C5/D5/R/B4:A5/
A5;
8/16/16/16/16/16/16/4/4/8/16/16/16/16/16/16/4/4/4/8/
8/8/8/8/8/8/8/8/8/
8/8/4/8/8/8/8/8/8/8/8/4/4/4/4/8/8/8;
S 2/S 3/S 4/S 5/S 6/S 7/S 11/S 12/S 13/S 14/S 15/S
16;
1 3/4 7/10 12/13 16/21 22/24 25/27 28/30 33/34
37/42 43;
99 01/21 22/24 25/27 28/30 31/32 33/34 35/09 10;
14 15 0 2 8 0 -1
IN 16 0 0 .70

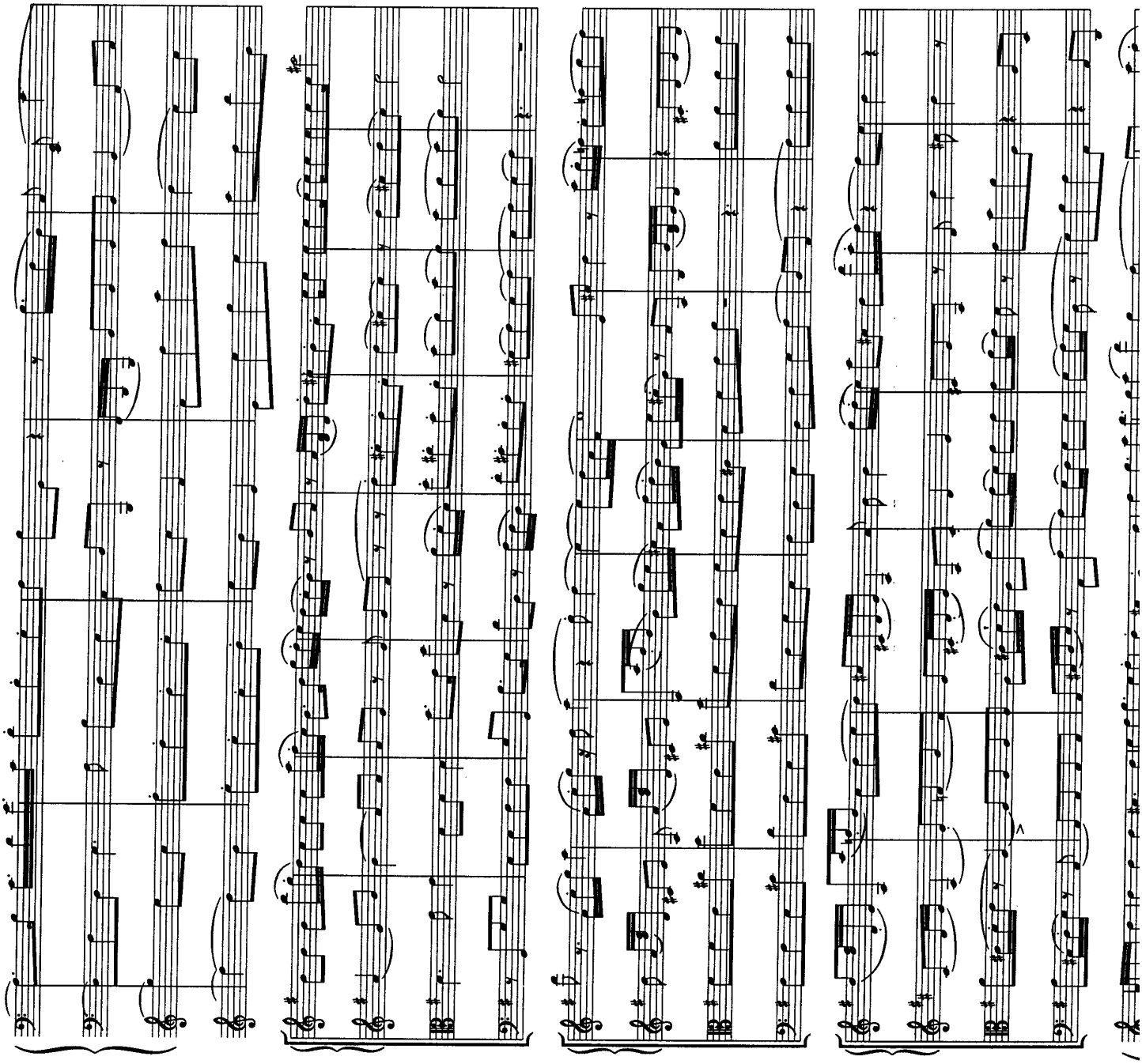
TR/K2S/D5/B5/B5/A5/G5/F5/E5/F5/D6/D6/C6/A5/A
5/GS5/A5/E5/R/GN5/F5/A5/R/
A5/C4/G5/E5/R/G5/F5/A5/CN6/B5/DS5/E5/B5/A5/C
6/D6/G5/F5/E5/D5/E5/D5/R/A5/
C4;
8/8/2/16/16/16/16/8/8/2/16/16/16/16/8/8/8/8/8/8/8/8/1
28/8/8/8/8/8/8/4/
8/8/8/8/8/8/8/8/8/16/16/4/4/8/8/8;
;
1 2/4 7/8 9/11 14/15 16/18 19/20 21/22 23/25 26/28
31/32 35/36 38/41 42;
04 07/08 09/11 14/15 16/18 19/22 23/25 26/28 29/30
31/32 33/34 35;
IN 17 0 0 .70

TR/RW/M2/RW/M2/RW/M2/RW/M2/RW/M2/C5:E5
/C5:E5/C5:E5/G4:D5/G4:D5/E4:C5/R/
M2;
1/1/1/1/1/8/16/16/8/8/4/4;
;
1 3/4 5;
;
IN 18 0 0 .70

TR/K2S/F4/D5/C5/B4/B4/GF4/F4/E4/A5/E5/A4/R/A
4/F5/E5/F5/C6/E4:C4/B3:D4/
GS4/C6/A5/A5/G5:B5:D6/A5:C6/C6/D5/C5:A5/G4:C
5/F4:D5/F5:A5/E5:G5/C5/D5/
AN5:C6/B5/DS5/E5/B5/A5/R/G5/F5/E5/D5/E5/D5/R
;
8/16/16/4/16/16/16/4/16/16/4/4/8/16/16/8/8/16/128/4/
16/16/16/16/16/16/
4/4/4/4/4/4/4/4/4/8/8/8/8/4/8/8/8/16/16/4/4/4;
S 17/S 17/S 18;
1 3/5 7/9 10/12 14/15 16/17 18/20 25/35 38/41 43;
04 03/09 10/15 14/12 14/26 24/37 38/09 12;
z
```


5
a 2.
p
f
tr
5


Andante.
Violino I.
Violino II.
Viola.
Violoncello e Basso.
Andante.
6
6



IN 1 0 0 .70

BA/M4/M4/RW/M4/R/R/D3/F3/D3/M4/E3/R/M4/D3/
F3/F3/A3/M4/F3/D3/B3/M4/G3/F3/
E3/A3/M4/D3/A2/D2/M4/D3/A3/A3/C4/M4;
2/8/8/8/8/8/4/4/8/8/8/4/8/8/8/4/4/8/8/8/8/4/8/8/8/4;
S 6/S 7/S 8;
1 3/5 7/9 11/14 15/16 17/19 21;
13 15;
14 1 0 4 8 0 -1
IN 2 0 0 .70

BA/RW/R/E3/G3/E3/F3/R/B2/E3/A3/B3/G3/G3/E3/C
4/A3/G3/F3/B3/B2/R/G3/R/G3/
R;
2/8/8/8/8/4/4/8/8/8/4/8/8/8/8/4/8/8/8/8/4./4/8/8/8;
S 6/S 9/S 8;
1 3/6 8/10 13/15 16;
14 15;
IN 3 0 0 .70

TR/RW/R/F4/A4/F4/G4/CS5/D5/A4/E4/R/B4/D4/R/C
4/D4/R/R/R/D4/F5;
2/8/8/8/8/4./8/8/8/8/4/4/4.8/8/4/4/8/8/8/8;
S 6/S 7/S 8;
1 3/6 8/13 14;
12 13/08 10;
IN 4 0 0 .70

TR/A4/F4/D4/D5/D5/D5/D5/CS5/D5/E5/F5/G5/E5/F
5/D5/CS5/B4/D5/F5/G5/A5/B5/
G5/A5/D6/G5/F5/R/R/C5/D4/R/A5/F5/C5;
16/16/16/8/8/8/8/8./16/16/32/16./32/8/8/8/4/8/8/16./32
/16./32/8/8/4/4/
8/8/8/8/8/16/16/16;
S 2/S 2/HW 2/S 14/S 15/S 17/S 31/S 31;
1 3/4 7/8 9/10 13/14 16/18 19/20 23/24 25/28 29/30
32;
01 03/24 25/27 28/30 32;
IN 5 0 0 .70

BA/K1S/A3/CS3/D3/E3/R/A2/M4/A2/A2/A2/A2/M4/
A2/CS3/D3/E3/R/A2/A3/M4/A3/
G3/F3/G3/G3/M4/G3/A3/G3/D3/R/M4/G3/B3/A3/A2
/M4/R/A2/D2/M4;
8/16/16/16/8/8/8/8/8/8/8/16/16/16/8/8/8/8/16/16/8/8/8/
16/16/8/8/8/8/8/
8/4/8/8;
S 3/S 15;
1 4/6 9/10 13/14 15/16 18/19 20/21 23/25 28/29 30;
02 04/05 06/11 13/17 18/21 22/22 25/15 16;
14 5 0 4 9
14 5 0 4
IN 6 0 0 .70

AL/K1S/A4/CS4/D4/E4/R/A3/A3/A3/A3/A3/A3/CS4
/D4/E4/A3/A4/A4/G4/F4/G4/G4/
G4/A4/G4/F4/R/G4/B4/A4/A3/R/A3/D3;
8/16/16/16/8/4/8/8/8/8/8/16/16/16/8/8/8/16/16/8/8/8/1
6/16/8/8/8/8/8/8/
4/8/8;
S 3/C- 5.5 5.7/S 12/HW 12;
1 4/6 9/10 13/14 15/16 18/19 20/21 23/25 28/29 30;
02 05/05 06/05 06/05 06/05 06/05 06/11 13/17 18/22
23/15 16;
IN 7 0 0 .70

TR/K2S/C4/D4/E4/A3/E4/FN4/G4/F4/E4/CS4/D4/E4
/A3/C4/D4/E4/CS4/E4/A3/R/D4/
D5/CS5/D5/R;
8/16/16/4/8/8/8/8/8/16/16/16/8/8/4/4/8/8/8/8/8/4/8/4/8;
S 5/S 5/S 10/S 11/S 14;
1 3/5 8/9 12/13 14/17 19;
01 03/04 05/04 05/06 08/10 12/11 12;
14 7 0 2 8 0 -1
IN 8 0 0 .70

TR/K1S/D5/D5:F5/D4/E4/A3/A5/FN5/D5/C5/D5/E5/
D5/CS5/CS4/D4/E4/A3/A4/B4/
B4/G5/F5/E5/A5/CS5/D5/D6/A5/F5/R/F5/E5/D5/R;
8/16/16/16/8/16/16/16/8/8/8/8/8/16/16/16/4/8/8/4/16/1
6/16/8/8/8/16/16/
16/4/8/8/4/4;
S 3/S 3/S 7/HW 7/S 7/S 22/S 28/S 28;
1 4/5 8/9 12/13 16/21 23/24 25/26 29/30 31;
01 04/06 08/10 12/14 16/21 23/22 23/27 29/29 30;
IN 9 0 0 .70

BA/K1S/F3/F3/E3/CS4/M4/D4/F3/E3/CS4/M4/D4/F3
/G3/E3/M4/F3/D3/E3/M4/D3/F3/
G3/A3/M4/D3/A2/R/M4/A3/A3/A3/A3/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/8/8/8/8;
;
1 4/5 8/9 12/13 15/16 19/20 21/22 25;
19 20/21 22;
14 9 0 4 9
14 9 0 4
IN 10 0 0 .70

AL/K1S/F4/F4/E4/CS5/D5/F4/E4/CS5/D5/F4/G4/E4/
F4/D4/E4/CS4/D4/F4/G4/A4/
RW/R/A4/A4/A4/A4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/2/4./8/8/8/8;
;
1 4/5 8/9 12/13 16/17 20/21 24;
;
IN 11 0 0 .70

TR/K1S/D5/A4/D5:F5/D4/CS4/E4/A3/A4/D5:F5/D4/
CS4/E4/A3/A5/F5/D5/B4/G5/E5/
CS5/A4/F5/D5/B4/G4/E5/CS5/G4/R/F4/A3/B3/G4/D
4:F4/E4/D4/R/CS4/D4/E4/D4;
8/16/16/16/8/8/8/16/16/16/8/8/8/16/16/16/8/16/16/16/16/
8/16/16/16/8/8/16/16/
16/8/8/8/8/16/16/16/4/4/8/8/8/8;
S 15/S 23/S 27/S 36;
2 4/5 6/8 10/11 12/13 16/17 20/21 24/25 28/29 30/31
34/36 39;
02 03/08 10/14 17/14 15/18 20/22 24/27 28/32 34/37
39;
14 11 0 2 8 0 -1
IN 12 0 0 .70

TR/K1S/D6/R/A4/E5/G5/A5/A4/E5/G5/R/F5/A5/R/G
5/F5/E5/E5/D5/A4/F4/E5/E4/
CS5/D5/R/A5/G5/FN5/E5/FN5/G5/F5;
8/8./16/16/16/4/16/16/16/16/8/4/4/8/4/4/8/16/16/16/1/
8/8/4/8/16/16/16/
8/8/8/8;
S 3/S 3/S 7/S 7/S 7/S 11/S 23/HW 23/S 23/S 25;
2 4/6 8/14 17/19 20/22 24/25 28;
02 04/06 08/10 11/12 13/13 14/15 18/22 24/26 28;
IN 13 0 0 .70

BA/K1S/R/G2/G3/G3/M4/E3/E3/F3/F3/M4/G3/G2/B
3/G3/M4/D4/D3/R/A3/F3/D3/M4/
D4/CS4/B3/A3/M4/GS3/A3/G3/A3/M4/G3/A3/G3/A
3/M4/R/RW/M4;
8/8/8/8/8/8/8/8/8/8/8./16/8/8/8/16/16/16/8/8/8/8/8/8/8/
8/8/8/8/8/8/4./2;
S 17/S 18/S 19/S 20;
1 3/4 7/8 9/10 11/12 13/14 16/17 20/21 24/25 28;
14 16/21 22/23 24/24 26/27 28;
14 13 0 4 9
14 13 0 4
IN 14 0 0 .70

AL/K1S/D4/G4/G4/D4/D4/D4/B4/G4/D5/D4/R/A4/F
4/D4/D5/CS5/B4/A4/B4/A4/B4/
A4/B4/A4/B4/A4/A4;
4./8/4/8/8/4/8./16/8/8/8/16/16/16/8/8/8/8/8/8/8/8/8/8/
8/2;
S 12/S 12/S 14/S 15/S 16/S 17;
4 5/7 8/9 10/11 13/14 17/18 21/22 25;
11 13/18 19/20 21/22 24/24 25;
IN 15 0 0 .70

TR/K1S/A4/G4/B4/B4/A4/A4/A4/G4/R/G4/G4/F4/R/
R/D5/CS5/B4/A4/D5/CS5/C5/R/
D5/CS5/D5/C5/E5;
4/8/8/4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/2;
S 12/S 13/S 14/S 15;
2 3/5 6/7 8/10 11/12 15/16 18/19 22;
01 02/04 05/11 12/16 17/17 18/19 20/21 22;
14 15 0 2 8 0 -1
IN 16 0 0 .70

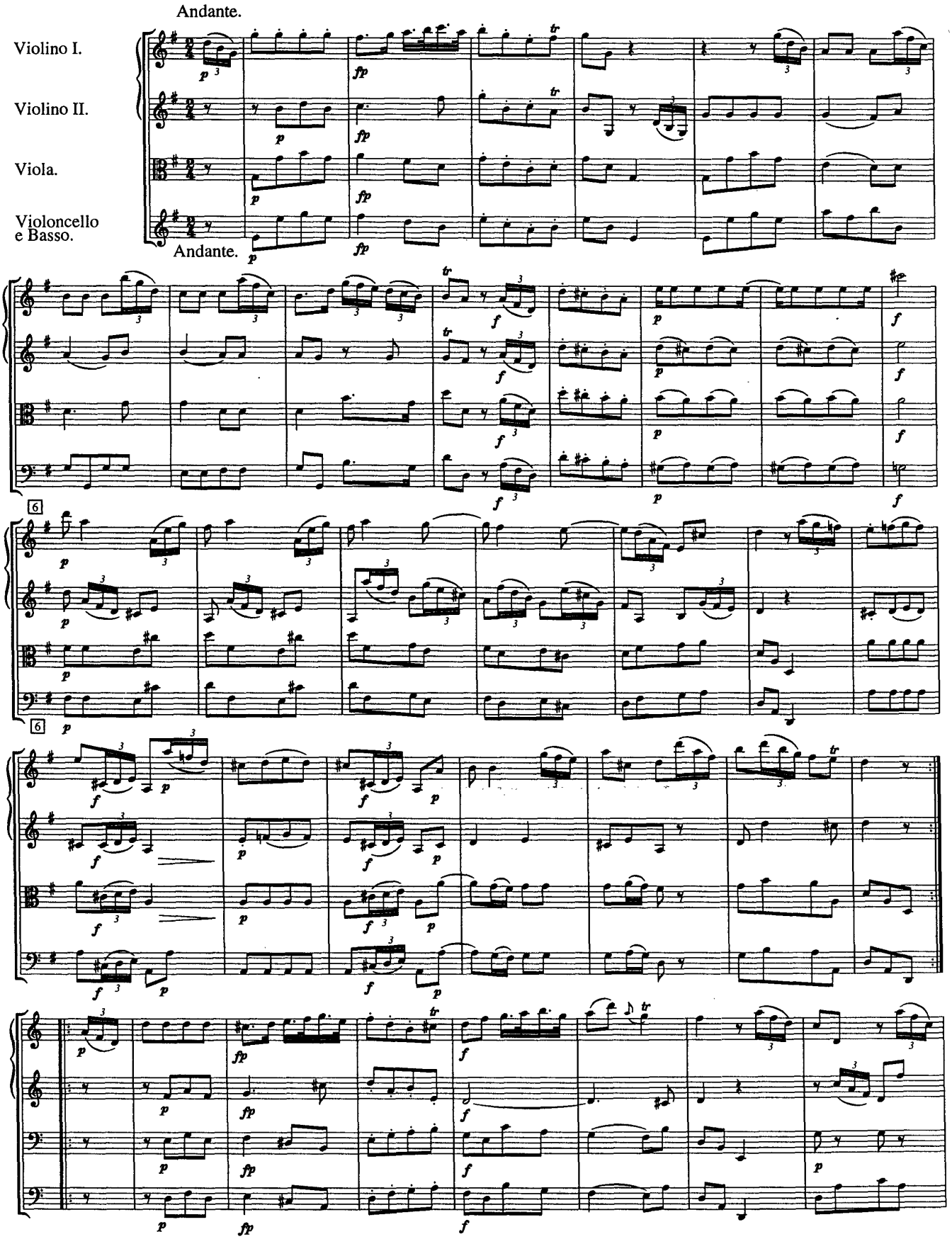
TR/K1S/B4/B4/B4/B5/G5/D5/C5/C5/C5/A5/F5/C5/B
4/D5/G5/F5/E5/D5/C5/B4/R/B4/
A4/R/A4/D4:F4/D4/D5/CS5/B4/A4/E5/E5/E5/E5/E5/
E5/E5/E5/E5/E5/CS6;
8/8/8/16/16/16/8/8/8/8/16/16/16/8./16/16/16/16/16/16/1
6/8/8/8/8/16/16/16/
8/8/8/8/16/8/8/8/16/16/8/8/8/16/2;
S 5/S 5/S 11/S 11/S 16/S 16/S 19/S 26/S 27/S 28/S
29;
1 2/3 6/7 8/9 12/13 14/15 17/18 20/21 22/23 25/26
29/30 31/32 34/35 39;
04 06/10 12/15 17/18 20/23 25/34 35;
IN 17 0 0 .70

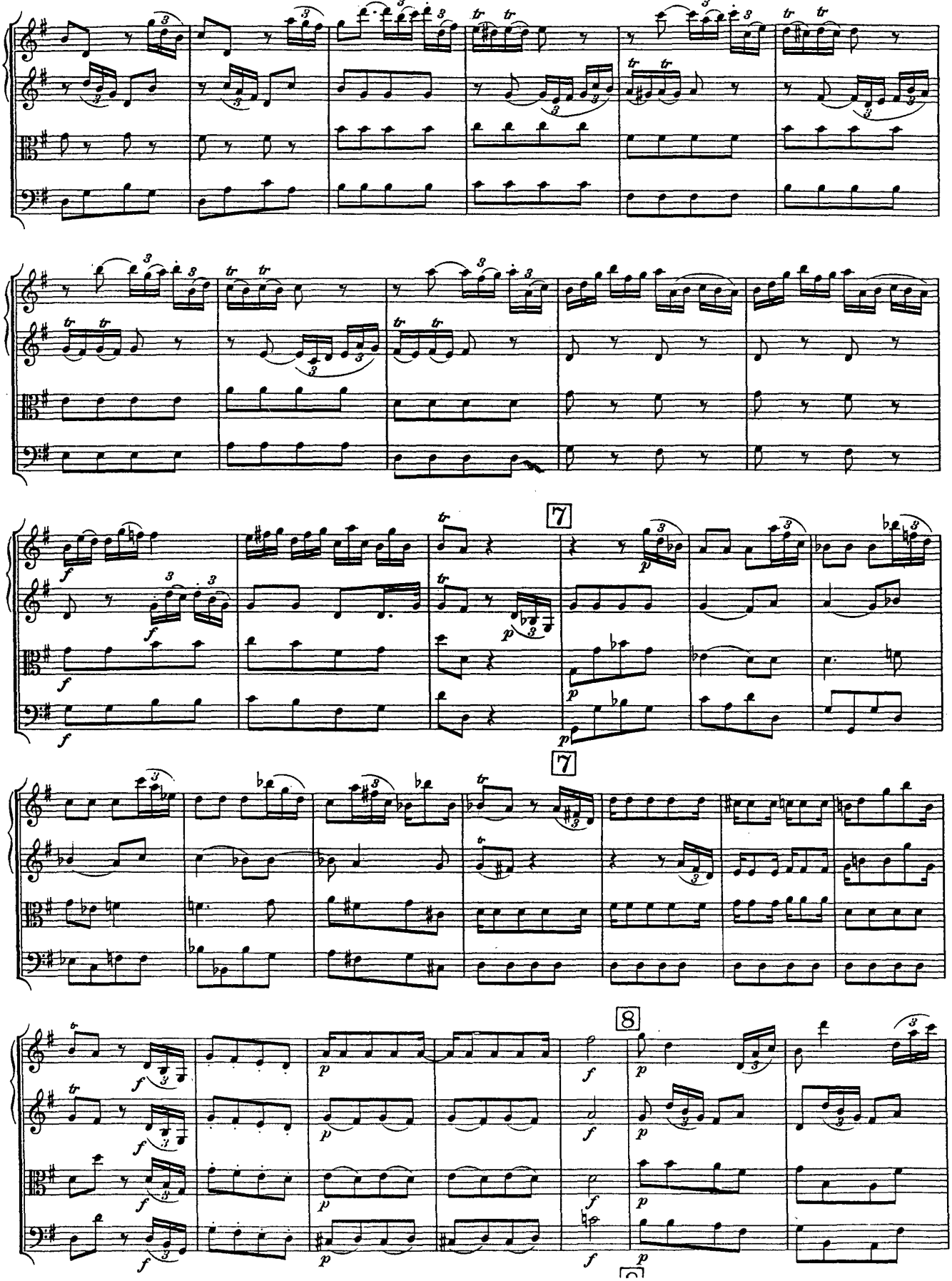
TR/M4/F5/D5/B4/M4/E5/C5/A4/B4/M4/E5/B4/E4/M
4/E4/E5/G5/E5/M4/A5/F5/B5/B4/
M4;
4/8/8/8/8/8/8/8/8/4/8/8/8/8/8/8/8/8/8;
S 4/S 5/S 6/S 7;
2 3/4 7/8 9/11 14/15 18;
99 01/99 01/01 02;
IN 18 0 0 .70

TR/G5/E5/C5/F5/D5/B4/C5/F5/C5/F4/F4/F5/A5/F5/
D5/C5/C5;
4/8/8/8/8/8/8/8/8/4/8/8/8/8/8/4/8/8;
S 4/S 5/S 6/S 7;
2 3/4 7/8 9/11 14/16 17;
99 01/15 16;
14 18 0 3 8 0 -1
IN 19 0 0 .70

BA/D3/F3/D3/E3/A3/B3/D3/E3/C3/D3/B1/R/F2/D2/
B1/B2/B2/B2/B2/B2/A2/C3;
8/8/8/4./8/8/8/8/8/8/8/8/8/16/16/16/8/8/8/8/4/8/8;
;
1 3/6 9/10 11/12 14/15 18/20 21;
99 01/12 14/19 20;
IN 20 0 0 .70

BA/A3/B3/C4/D4/E4/C4/D4/B3/G3/A3/B3/B2/R/R/B
3/F3/D3/C3/E2:G2/C4;
8./16/16./16/16./16/8/8/8/8/8/8/4/8/16./16/16/8/8/4.;
S 7/S 8/S 9;
1 2/3 6/7 10/11 12/13 15;
99 01/99 01/99 01/99 01/13 15/17 99;
z


Andante.
Violino I.
Violino II.
Viola.
Violoncello
e Basso.
Andante.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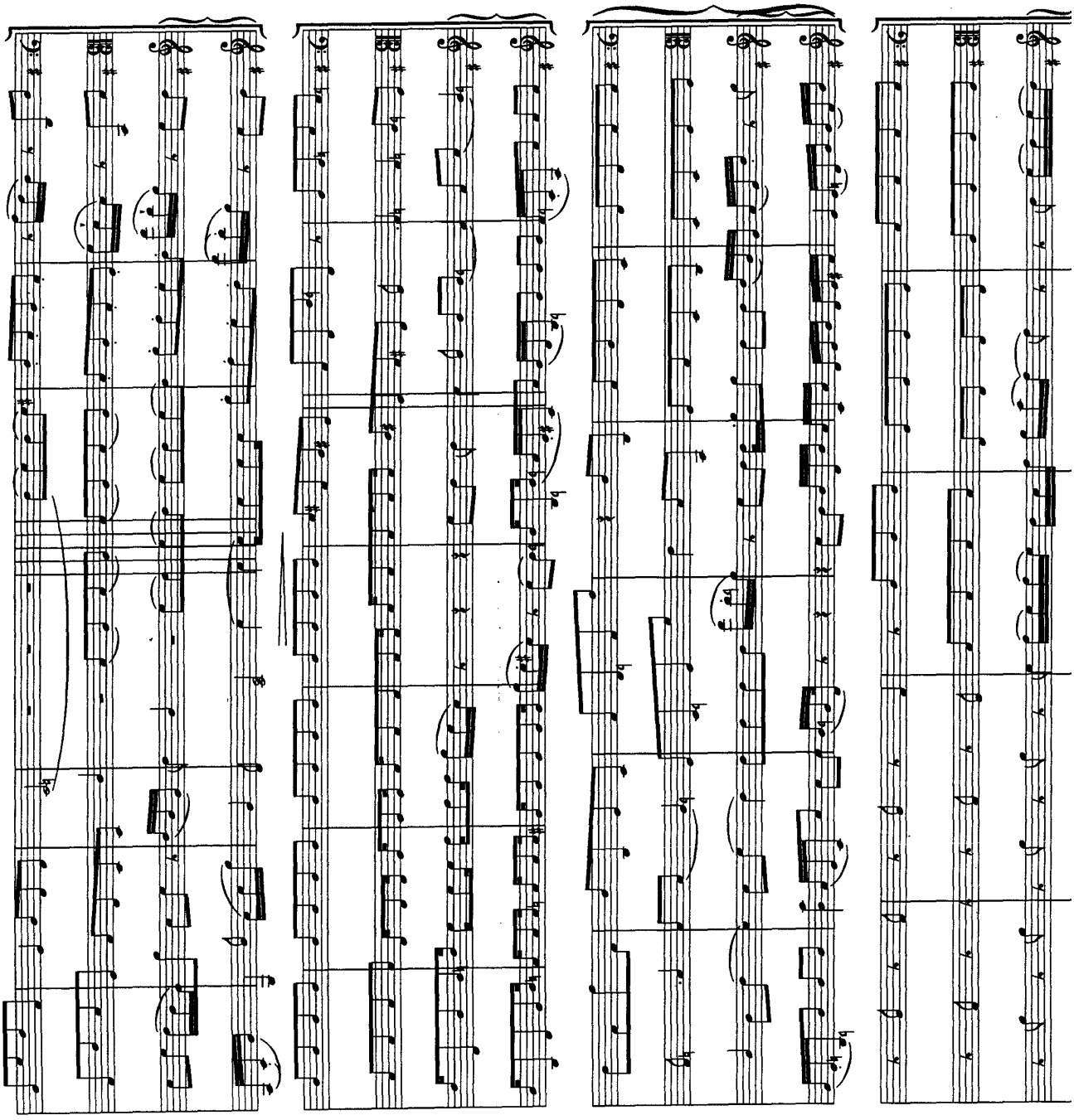
7
8



```
IN 1 0 0 .70

BA/K1S/D3/D4/R/D3/B2/G2/R/M4/G3/F3/E3/D3/M4
/CS3/D3/C3/D3/M4/M4/M4/M4/M4/
R/R/R/M4/CN4/M4/B3/B3/F3/A3/M4/G3/B2/A2/F3/
M4;
8/8/8/16/16/16/8/8/8/8/8/8/8/8/2/2/2/2/8/8/8/4/8/8/8/
8;
S 6/S 7/S 8/S 9;
1 2/3 5/6 9/10 13/15 17/19 22;
03 05/10 11/12 13/13 14/13 14;
14 1 0 4 9
14 1 0 4
IN 2 0 0 .70

AL/K1S/D4/D5/R/D4/B3/G3/G4/F4/E4/D4/E4/D4/E4
/D4/E4/D4/E4/D4/R/C4/B4/B4/
A4/F4/G4/B3/A3/F4;
8/8/8/16/16/16/8/8/8/8/8/8/8/8/8/8/8/2/4/8/8/8/8/8/
8/8;
S 4/HW 4/S 6/S 7/S 8/S 9;
1 2/3 5/6 9/10 13/14 17/19 22/23 26;
03 05/10 11/12 13/14 15/16 17;
IN 3 0 0 .70

TR/K1S/G4/F4/R/D4/B3/G3/G4/F4/E4/D4/G4/F4/G4/
F4/G4/F4/G4/F4/R/B4/G4/D5/
B4/G4/R/F4/A4/D4/D5/B4/G4/F4/A4;
8/8/8/16/16/16/8/8/8/8/8/8/8/8/8/8/8/8/2/4/8/16/16/16/
8/8/8/8/16/16/16/
8/8;
S 4/S 4/HW 4/S 6/S 7/S 8/S 9;
1 2/3 5/6 9/10 13/14 17/20 22/23 24/25 28/29 30;
03 05/10 11/12 13/14 15/16 17/20 22/26 28;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/K1S/B4/A4/R/D4/B3/G3/G4/F4/E4/D4/A4/A4/A4
/A4/A4/A4/F5:A5/G5/D5/D4/A4/
C5/B4/D6/D5/A5/C6;
8/8/8/16/16/16/8/8/8/8/16/8/8/16/4/4/2/8/4/16/16/16/8/
4/16/16/16;
S 4/S 6/S 7/S 8/S 9/S 25;
1 2/3 5/6 9/10 13/19 21/24 26;
03 05/04 05/19 21/24 26/25 26/13 15;
IN 5 0 0 .70

BA/K1S/EF3/C3/FN3/F3/M4/R/B3/BF2/B3/G3/M4/
M4/A3/FS3/G3/CS3/M4/D3/D3/D3/
D3/M4/D3/D3/D3/D3/M4/D3/D3/D3/D3/M4/D3/D3/
D3/D3/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
8;
C 12.4 15.7;
1 4/5 8/9 12/13 16/17 20/21 24/25 28;
;
14 5 0 4 9
14 5 0 4
IN 6 0 0 .70

AL/K1S/G4/EF4/FN4/FN4/G4/A4/FS4/G4/CS4/D4/D
4/D4/D4/D4/F4/F4/F4/F4/G4/
G4/G4/A4/A4/A4/D4/D4/D4/D4;
8/8/4/4./8/8/8/8/8/16/8/8/8/16/16/8/8/8/16/16/8/16/16/
8/16/8/8/8/8;
;
1 2/6 9/10 14/15 19/20 22/23 25/26 29;
;
IN 7 0 0 .70

TR/K1S/BF4/A4/C5/C5/BF4/B4/B4/A4/G4/G4/F4/R/
R/R/A4/F4/D4/E4/E4/E4/F4/F4/
F4/G4/BN4/B4/G5/G4;
4/8/8/4/8/8/8/4/8/8/8/4/4/8/16/16/16/16/8/16/16/8/16/1
6/8/8/8/16;
;
2 3/5 6/10 11/12 14/15 17/18 20/21 25;
01 02/04 05/12 14;
14 7 0 2 8 0 -1
IN 8 0 0 .70

TR/K1S/C5/C5/C5/C6/A5/EF5/D5/D5/D5/BF5/G5/D
5/C5/A5/FS5/C5/BF4/BF5/B4/BF4/
A4/R/A4/FS4/D4/D5/D5/D5/D5/CS5/C5/C5/CN5/
C5/C5/BN4/D5/G5/B5/B4;
8/8/8/16/16/16/8/8/8/16/16/16/8/16/16/16/16/8/16/8/8/
8/16/16/16/16/8/8/
8/16/16/8/16/16/8/16/16/8/8/8/16;
S 5/S 5/S 15/S 23;
1 2/3 6/7 8/9 12/13 16/17 19/20 21/22 24/25 29/30
32/33 35/36 40;
04 06/10 12/14 17/20 21/22 24;
IN 9 0 0 .70

BA/K1S/G3/G3/B3/B3/M4/C4/B3/F3/G3/M4/D4/D3/
R/M4/G2/G3/BF3/G3/M4/C4/A3/
D4/D3/M4/G3/G2/G3/D3/M4;
8/8/8/8/8/8/8/8/8/8/4/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8:
;
1 4/5 8/9 10/11 14/15 18/19 22;
;
14 9 0 4 8 0 -1
14 9 0 4 9
14 9 0 4
IN 10 0 0 .70

AL/G4/G4/B4/B4/C5/B4/F4/G4/D5/D4/A3/G3/G4/BF
4/G4/EF4/D4/D4/D4/FN4;
8/8/8/8/8/8/8/8/8/8/4/8/8/8/8/4/8/8/4/8.8;
;
1 4/5 8/9 10/12 15/17 18;
16 17;
IN 11 0 0 .70

TR/K1S/D4/R/G4/D5/C5/D5/B4/G4/G4/G4/D4/D4/G
4/G4/F4/R/D4/BF3/G3/G4/G4/G4/
G4/G4/F4/A4/A4/G4/B4/B4;
8/8/16/16/16/16/16/16/8/8/8/16./32/8/8/8/16/16/16/8/8
/8/8/4/8/8/4/8/8/
4;
S 2/S 16;
2 4/5 7/8 9/10 12/13 14/15 17/18 21/23 24/26 27;
03 04/06 07/15 17/22 23/25 26;
14 11 0 2 8 0 -1
IN 12 0 0 .70

TR/K1S/B4/E5/D5/D5/G5/FN5/F5/E5/FS5/G5/D5/F5/
G5/C5/A5/C5/B4/G5/B4/B4/A4/
R/R/R/G5/D5/BF4/A4/A4/A4/A5/F5/C5/B4:C4/B4/B
4/B4/BF5/FN5/D5;
16/16/16/16/16/16/4/16/16/16/16/16/16/16/16/16/1
6/16/8/8/4/4/8/32/16/
16/8/8/8/16/16/16/4/8/8/8/16/16/16;
S 36;
1 3/4 6/8 10/11 13/14 16/17 19/20 21/22 24/25 26/27
30/32 33/34 37;
02 03/05 06/22 24/28 30/35 37;
IN 13 0 0 .70

BA/K1S/E3/E3/E3/E3/M4/A3/A3/A3/A3/M4/D3/D3/
D3/R/M4/G3/R/F3/R/M4/G3/R/F3/
R/M4;
8/8/8/8/8/8/8/8/8/8/8/4/8/8/8/8/8/8/8/8/8/8/8/8/8/8:
;
1 4/5 8/9 11;
;
14 13 0 4 9
14 13 0 4
IN 14 0 0 .70

AL/K1S/E4/E4/E4/E4/A4/A4/A4/A4/D4/D4/D4/D4/G
4/R/F4/R/R/R/F4/R;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8:
;
1 4/5 6/7 8/9 12;
;
IN 15 0 0 .70

TR/K1S/G4/F4/G4/F4/G4/R/R/E4/E4/C4/D4/E4/A4/
G4/F4/E4/F4/E4/F4/R/D4/R/D4/
R/D4/R/D4/R;
16/16/16/16/8/8/8/8/16/16/16/16/16/16/16/16/16/8/
8/8/8/8/8/8/8/8/8;
;
1 4/7 9/10 12/13 16;
01 02/03 04/06 07/07 08/13 14/15 16;
14 15 0 2 8 0 -1
IN 16 0 0 .70

TR/K1S/R/B5/G5/A5/B5/B4/D5/C5/B4/C5/B4/C5/R/
R/A5/A5/F5/G5/A5/A4/C5/B4/
D5/G5/B5/F5/G5/A5/A4/B4/C5/B4/A4/B4/D5/G5/B5
/F5/G5/A5/A4/B4/C5/B4/A4;
8/16/16/16/16/16/16/16/16/16/16/8/8/8/8/8/16/16/16/16/
16/16/16/16/16/16/
16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/
16/16/16;
S 4/S 16;
1 3/4 6/7 10/13 15/16 18/19 21/22 24/25 27/28 30/31
33/34 36/37 39/40 42;
99 01/02 03/07 08/09 10/12 13/14 15/17 18/27 29/39
41;
IN 17 0 0 .70

BA/K1S/D3/G3/B3/G3/M4/D3/A3/C4/A3/M4/B3/B3/
B3/B3/M4/C4/C4/C4/C4/M4/F3/
F3/F3/F3/M4/B3/B3/B3/B3/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
;
1 4/5 8/9 12/13 16/17 20/21 24;
;
14 17 0 4 9
14 17 0 4
IN 18 0 0 .70

AL/K1S/G4/R/R/R/F4/R/F4/R/B4/B4/B4/B4/C5/C5/C
5/C5/F4/F4/F4/F4/B4/B4/B4/
B4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/
;
4 7/8 11/12 15/16 19;
10 11/18 19;
IN 19 0 0 .70

TR/K1S/R/D5/B4/G4/R/D4/B4/R/C5/A4/F4/R/D4/C5
/B4/G4/G4/G4/R/G4/G4/E4/F4/
G4/C5/B4/R/A4/G4/A4/G4/A4/R/R/F4/F4/D4/E4/F4/
B4/A4/R;
8/16/16/16/8/8/8/8/16/16/16/8/8/8/8/8/8/8/8/16/16/1
6/16/16/16/8/16/16/
16/16/8/8/8/8/16/16/16/16./16/16/8;
S 29;
1 3/4 5/6 8/9 10/11 14/16 18/19 21/22 25/28 30/31
33;
01 03/06 08/15 16/24 25/27 28;
14 19 0 2 8 0 -1
IN 20 0 0 .70

TR/K1S/B4/D4/R/G5/D5/B4/C5/D4/R/A5/G5/F5/G5/
D6/D6/C6/D6/D5/F5/E5/D5/E5/
D5/E5/R/R/C6/C6/A5/B5/C6/C5/E5/D5/CS5/D5/C5/
D5/R;
8/8/8/16/16/16/8/8/8/16/16/16/8/8./16/128/128/8/8/16/
16/16/16/8/8/8/8/
16/16/16/16/16/16/16/16/16/16/8/8;
S 9/S 9/S 15/S 27;
1 2/3 5/6 7/8 10/11 12/13 17/18 21/24 26/27 29/30
33;
03 05/08 10/12 13/13 14/16 17/20 21/23 24/25 26/28
29/30 31/32 33;
z
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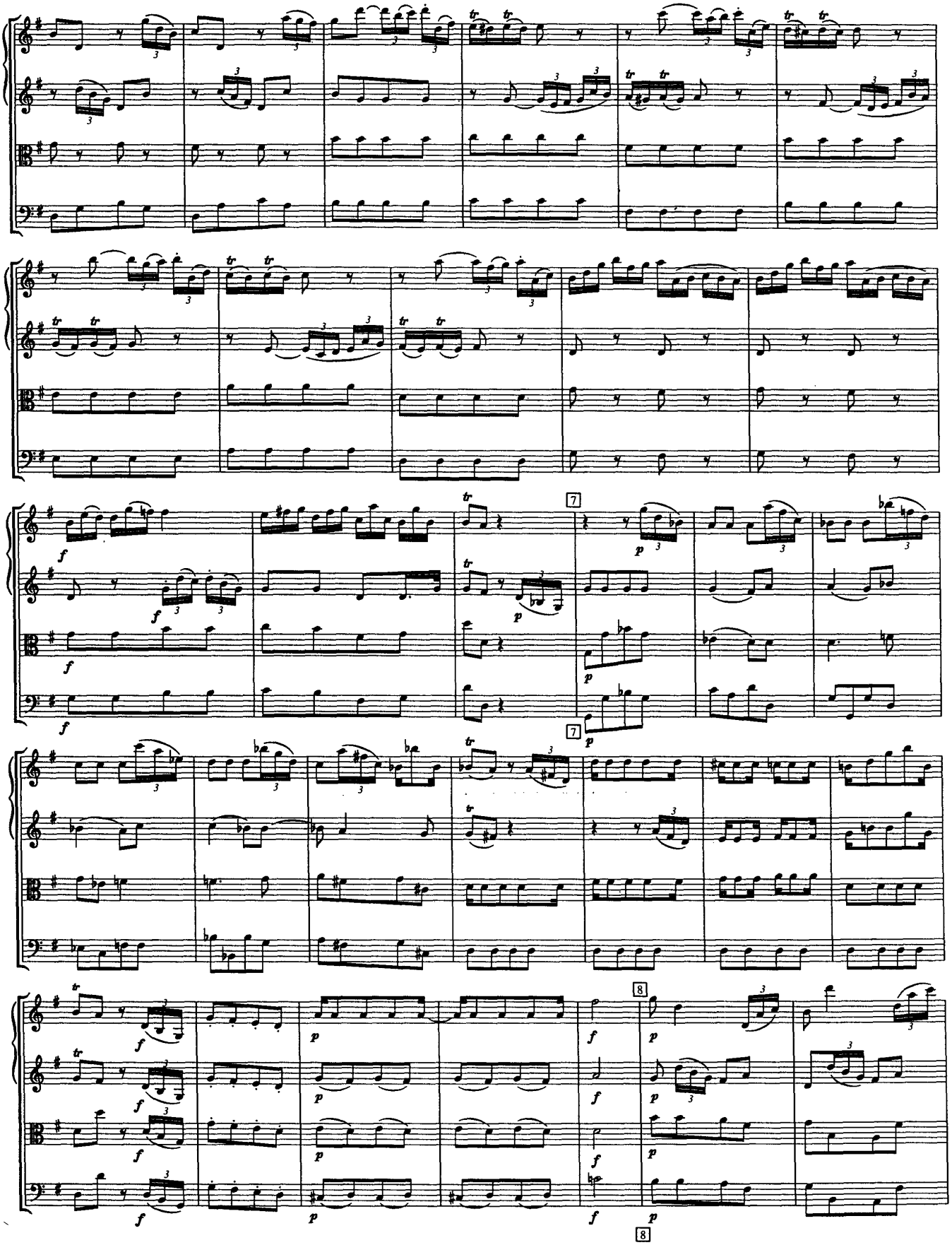
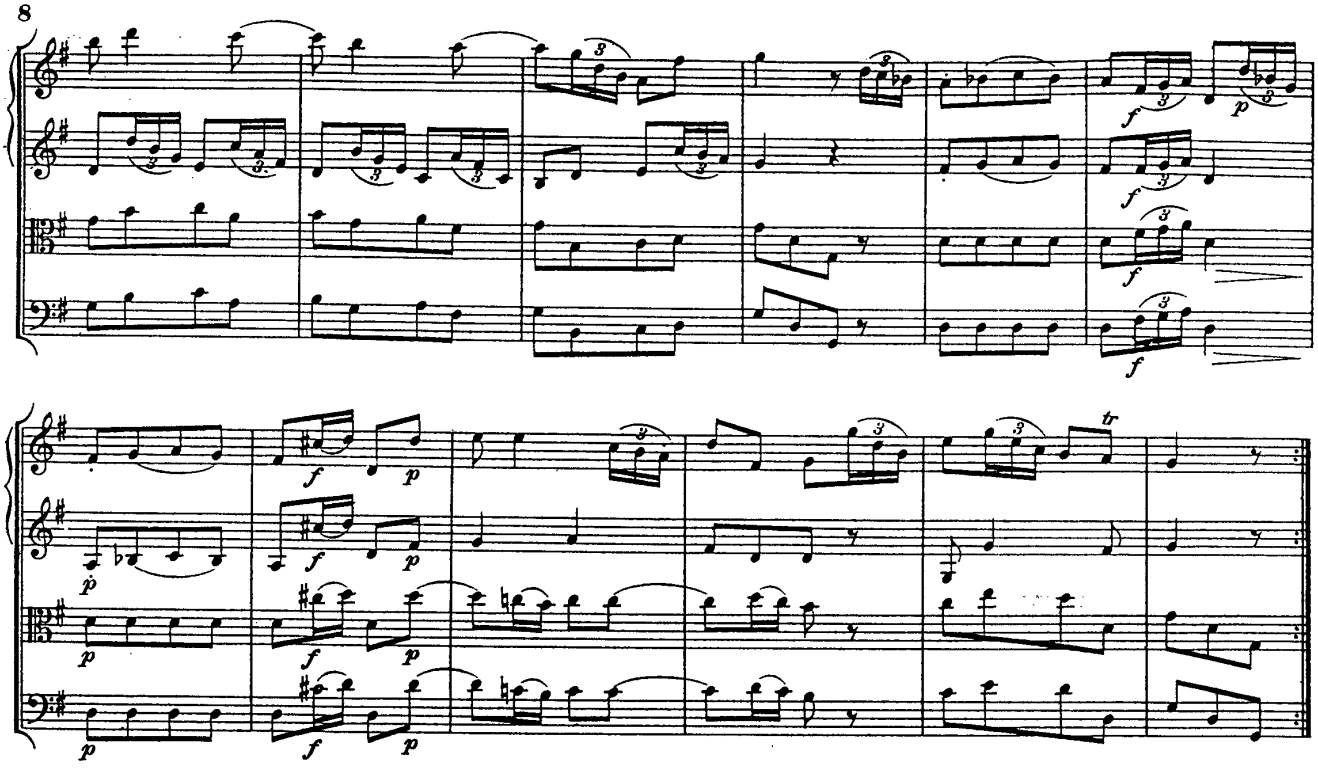
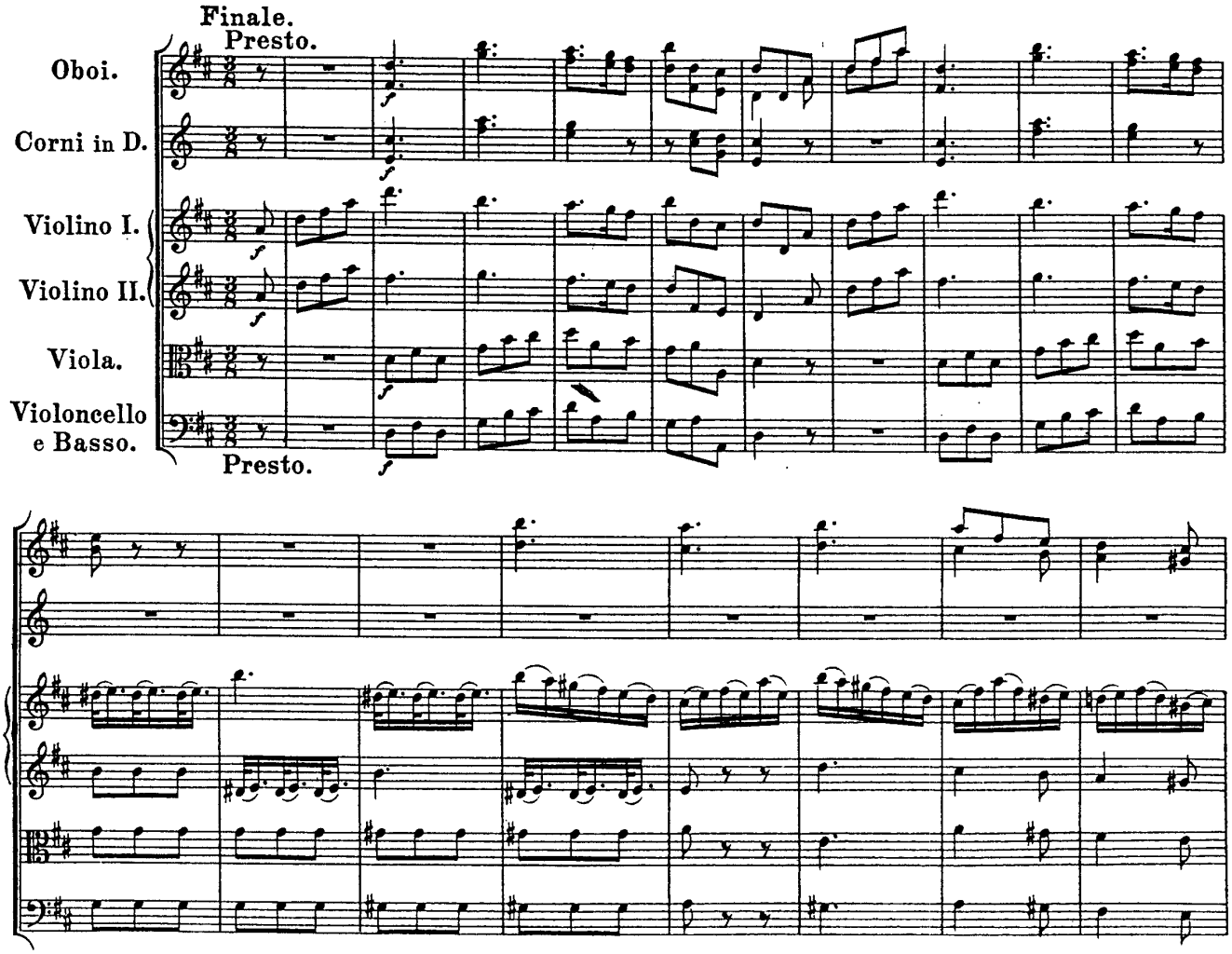


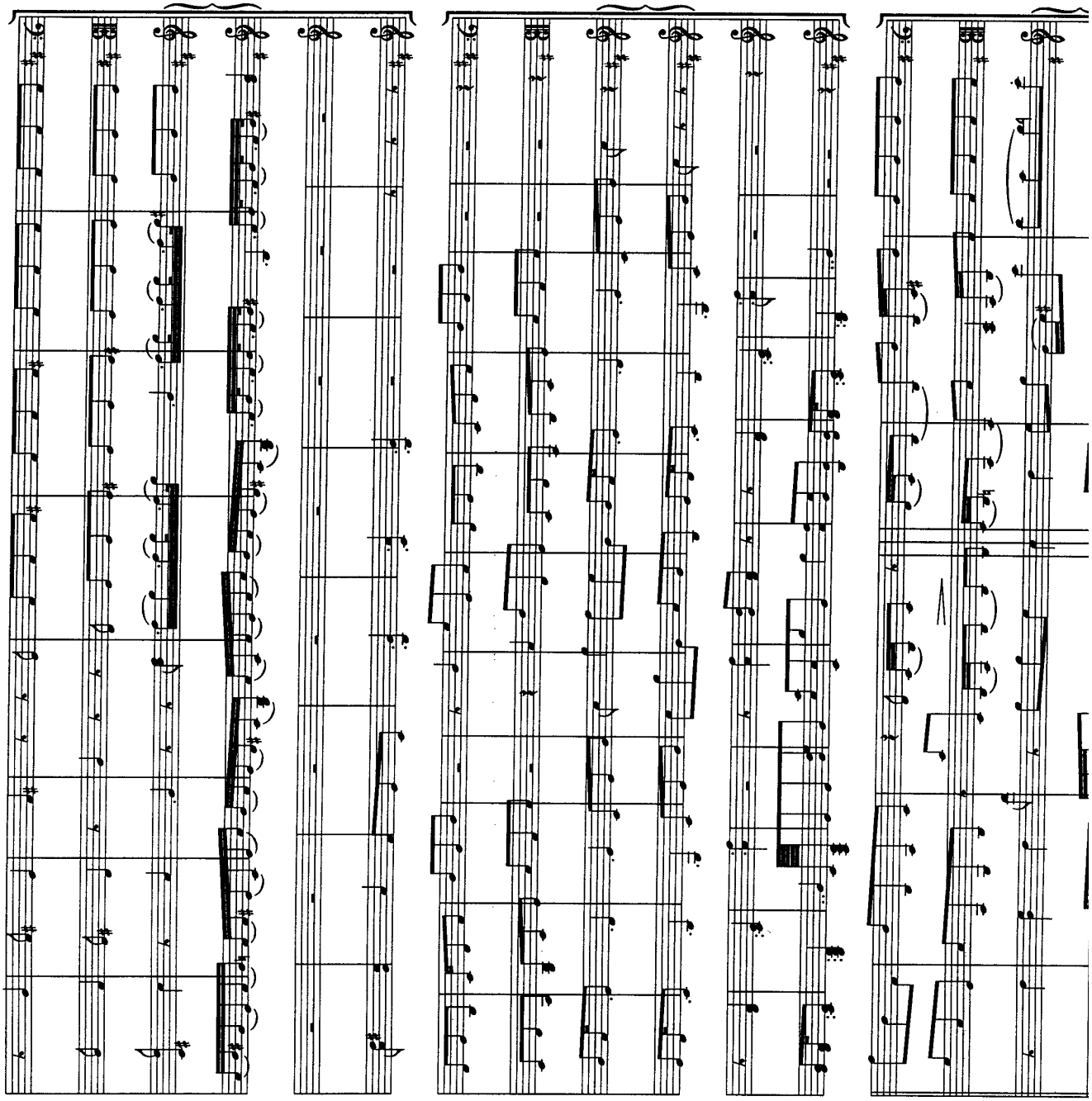


Finale.
Presto.

Oboi.
Corni in D.
Violino I.
Violino II.
Viola.
Violoncello e Basso.

Presto.





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IN 1 0 0 .70

BA/K2S/G3/G3/G3/M4/G3/G3/G3/M4/GS3/G3/G3/
M4/GS3/G3/G3/M4/A3/R/R/M4/GS3/
M4/A3/GS3/M4/F3/R/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/4/8/4/8/8;
;
1 3/4 6/7 9/10 12;
;
14 1 0 6 9
14 1 0 6
IN 2 0 0 .70

AL/K2S/G4/G4/G4/G4/G4/G4/GS4/G4/G4/GS4/G4/
G4/A4/R/R/E4/R/A4/GS4/F4/E4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/8/4/8/8;
;
1 3/4 6/7 9/10 12;
;
IN 3 0 0 .70

TR/K2S/B4/B4/B4/DS4/E4/D4/E4/D4/E4/B4/D4/E4/
D4/E4/D4/E4/G4:E4/R/R/D5/C5/
R/A4/AS5:G4;
8/8/8/32/16./32/16./32/16./4./32/16./32/16./16/16./8/8/
8/4./4/8/4/8;
;
1 3/4 9/11 16;
04 05/06 07/08 09/11 12/13 14/15 16;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/K1S/B4:D5/DS5/E5/D5/E5/D5/E5/B5/DS5/E5/D5
/E5/D5/E5/B5:D6/A5/GS5/F5/
E5/D5/C5/E5/F5/E5/A5/E5/B5:D6/A5/GS5/F5/E5/D5
/C5/F5/A5/F5/ES5/E5/DN5/E5/
F5/D5/BS4/C5;
4/32/16./32/16./32/16./4./32/16./32/16./32/16./16/16/1
6/16/16/16/16/16/
16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/
16/16/16/16/16;
;
2 7/9 14/15 20/21 26/27 32/33 38/39 44;
02 03/04 05/06 07/09 10/11 12/13 14/15 16/17 18/19
20/21 22/23 24/25 26/
27 28/29 30/31 32/33 34/35 36/37 38/39 40/41 42/43
44;
IN 5 0 0 .70

TR/RW/M2/RW/M2/RW/M2/RW/M2/RW/M2/RW/
M2/RW/M2/RW/M2;
4./4./4./4./4./4./4./4.;
;
;
;
IN 6 0 0 .70

TR/K2S/R/R/R/RW/RW/D5:B5/C5:A5/D5:B5/A5/F5/
E5/C5/A4:D5/GS4:C5;
8/8/8/4./4./4./4./4./8/8/8/4/4/8;
;
4 6;
;
IN 7 0 0 .70

BA/K2S/R/RW/M4/RW/M4/D3/F3/D3/M4/G3/B3/C4
/M4/D4/A3/B3/M4/G3/A3/A2/M4/D3/
R/M4/RW/M4/D3/F3/D3/M4/G3/B3/C4/M4/D4/A3/B
3/M4;
4/4./4./8/8/8/8/8/8/8/8/8/8/8/8/4/8/4./8/8/8/8/8/16/8/8/
8;
;
1 3/4 6/7 9/10 12/14 16/17 19/20 22;
;
14 7 0 6 9
14 7 0 6
IN 8 0 0 .70

AL/K1S/R/RW/RW/D4/F4/D4/G4/B4/C5/D5/A4/B4/
G4/A4/A3/D4/R/RW/D4/F4/D4/G4/
B4/C5:E5/D5/A4/B4;
4/4./4./8/8/8/8/8/8/8/8/8/8/8/8/4/4/4./8/8/8/8/8/8/8/8/8;
;
1 3/4 6/7 9/10 12/14 16/17 19/20 22;
;
IN 9 0 0 .70

TR/K2S/R/A4/D5/F5/A5/F5/G5/F5/E5/D5/D5/F4/E4/
D4/A4/D5/F5/A5/F5/G5/F5/E5/
D5;
4/8/8/8/8/8/4./4./8./16/8/8/8/8/4/8/8/8/8/4./4./8./16/8;
;
2 4/7 9/10 12/15 17/20 22;
;
14 9 0 2 8 0 -1
IN 10 0 0 .70

TR/K2S/R/R/A4/D5/F5/A5/D6/B5/A5/G5/F5/B5/D5/
C5/D5/D4/A4/D5/F5/A5/D6/B5/
A5/G5/F5;
8/8/8/8/8/8/8/4./4/8./16/8/8/8/8/8/8/8/8/8/8/4./4./8./16/8;
;
2 4/7 9/10 12/13 15/16 18/21 23;
;
IN 11 0 0 .70

TR/R/RW/M2/RW/M2/E4:C5/M2/F5:A5/M2/E5:G5/
R/M2/R/C5:E5/G4:D5/M2/E4:C5/R/
M2/RW/M2/E4:C5/M2/F5:A5/M2/E5:G5/R/M2;
4/4./4./8./4./4/8/8/8/8/8/4/8/4./4./4./4/8;
;
4 5;
;
IN 12 0 0 .70

TR/K2S/R/RW/RW/D5/G5:B5/F5:A5/E5:G5/D5:G5/
D5:B5/F4:D5/E4:C5/D4/D5/D4/A4:A5:A5/
A4:C4/D5/G4:F4:D5/F5/F5/A5:C6:E6:C6:E6/A5/D5/
G5:B5:D6/F5:A5/E5:G5/D5:F5;
4/4./4./4../4./8./16/8/8/8/8/4/8/8/8/8/8/8/8/128/128/4.
/4./8./16/8;
;
3 5/6 8/10 13/14 19/22 24;
;
IN 13 0 0 .70

BA/K1S/D3/D3/D3/D3/M4/D3/CS4/D4/D3/D4/M4/D
4/C4/B3/M4/M4/M4/R/C4/D4/C4/
B3/R/M4/C4/E4/D4/D3/M4/G3/D3/G2/MD4;
8/8/8/8/8/16/16/8/8/8/16/16/8/8/16/16/8/4/8/8/8/8/8/
8;
;
1 4/5 7/8 9/10 12/13 15/17 20/21 23;
06 07/11 12/14 15/09 10;
14 13 0 4 9
14 13 0 4
IN 14 0 0 .70

AL/K1S/D4/D4/D4/D4/D4/C5/D5/B4:D5/D4/D5/D5/
CN5/B4/C5/C5/C5/D5/C5/B4/D3/
R/C5/E5/D5/D4/G4/D4/G3;
8/8/8/8/8/16/16/4/8/8/8/16/16/8/8/8/16/16/8/8/8/8/8/8/
8/8/8/8;
C 14.8 16.0;
1 4/5 7/9 10/11 13/14 15/16 18/19 20/21 24/25 27;
06 07/12 13/17 18/10 11/15 16;
IN 15 0 0 .70

TR/K1S/A3/BF3/C4/B3/A3/CS5/D5/D4/F4/G4/A4/F4
/D4/D4/R/G3/G4/B4:F4/G4/R;
8/8/8/8/8/16/16/8/8/4/4/8/8/8/8/8/4/4/4/8;
S 1;
1 4/5 7/8 9/12 14;
02 04/06 07;
14 15 0 2 8 0 -1
IN 16 0 0 .70

TR/K1S/F4/G4/A4/G4/F4/CS5/D5/R/E5/E5/C5/B4/A
4/RW/R/D5/F4/G4/G5/D5/B4/E5/
G5/E5/C5/B4/A4/G4/R;
8/8/8/8/8/16/16/8/8/4/16/16/16/4./4/8/8/8/16/16/16/8/1
6/16/16/8/8/4/8;
S 1/S 11/S 17/S 21;
1 4/5 7/10 12/13 14/15 18/19 22/23 24;
02 04/06 07/10 12/16 18/17 18/20 22;
IN 17 0 0 .70

BA/K1S/G3/B3/C4/A3/M4/B3/G3/A3/F3/M4/G3/B2/
C3/D3/M4/G3/D3/G2/R/M4/D3/D3/
D3/D3/M4/D3/F3/G3/A3/D3/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/16/16/16/4;
S 22;
1 4/5 8/9 12/13 15/16 19/20 23;
21 23/24 99;
14 17 0 4 9
14 17 0 4
IN 18 0 0 .70

AL/K1S/G4/B4/C5/A4/B4/G4/A4/F4/G4/B3/C4/D4/G
4/D4/G3/R/D4/D4/D4/D4/D4/F4/
G4/A4/D4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/16/16/16/4;
S 22;
1 4/5 8/9 12/13 15/16 19/20 23;
21 23/22 23/24 99/24 99;
IN 19 0 0 .70

TR/K1S/D4/D5/B4/G4/R/E4/C5/A4/F4/R/D4/B4/G4/
E4/R/C4/A4/F4:B3/C4/B3/D4/
E4/C5/B4/A4/R/G4/R/F4/G4/A4/G4/F4/F4/G4/A4/R/
D4;
8/16/16/16/8/8/16/16/16/8./8/16/16/16/8/8/16/16/16/8/
8/8/16/16/16/8/4/
4/8/8/8/8/8/16/16/16/8/4;
HW 6/S 15/S 24/S 30;
1 4/5 8/9 12/13 16/17 18/19 22/24 27/28 31;
02 04/06 08/10 12/14 16/20 22/25 27/29 31;
IN 20 0 0 .70

TR/K1S/B5/D6/C6/B5:E6/B5/A5/C4/A5/G5/D5/B4/A
4/F5/G5/R/D5/C5/BF4/A4/B4/
C5/B4/B4/A4/F4/G4/A4/R/D4/D5/BF4/G4;
8/4/8/8/4/8/128/8/16/16/16/8/8/4/8/16/16/16/8/8/8/8/4/
8/16/16/16/8/8/16/
16/16;
S 18/HW 28;
6 7/8 11/12 13/15 17/18 21/23 26/27 30;
03 04/06 08/09 12/15 17/19 21/24 26/28 30;
z
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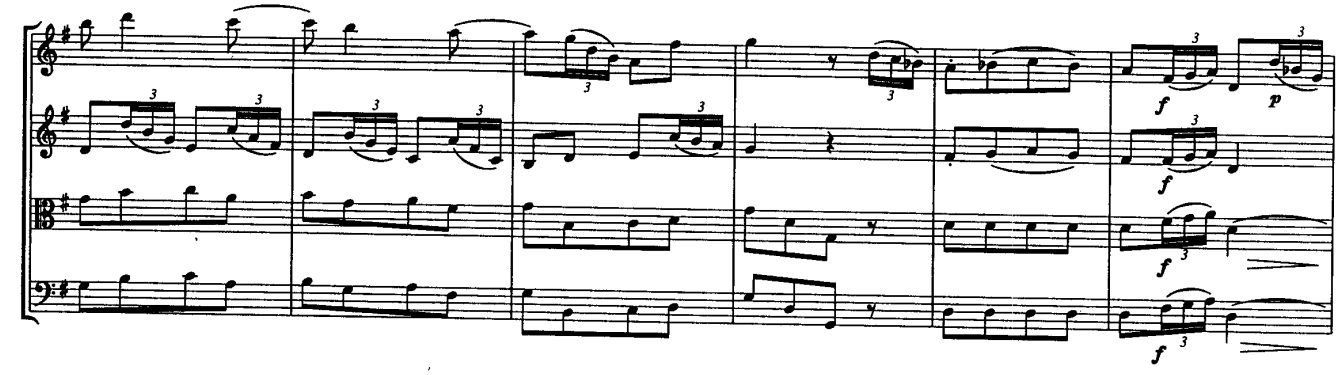
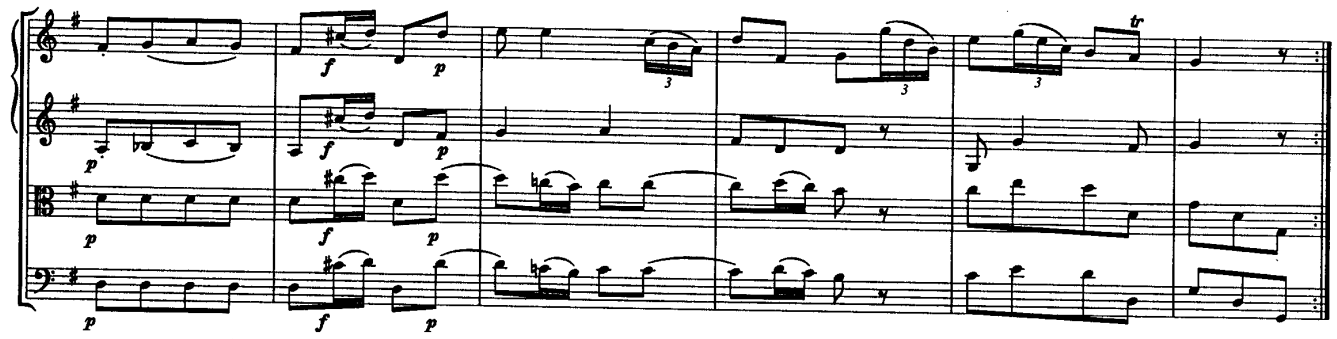




Finale.

Presto.

Oboi.

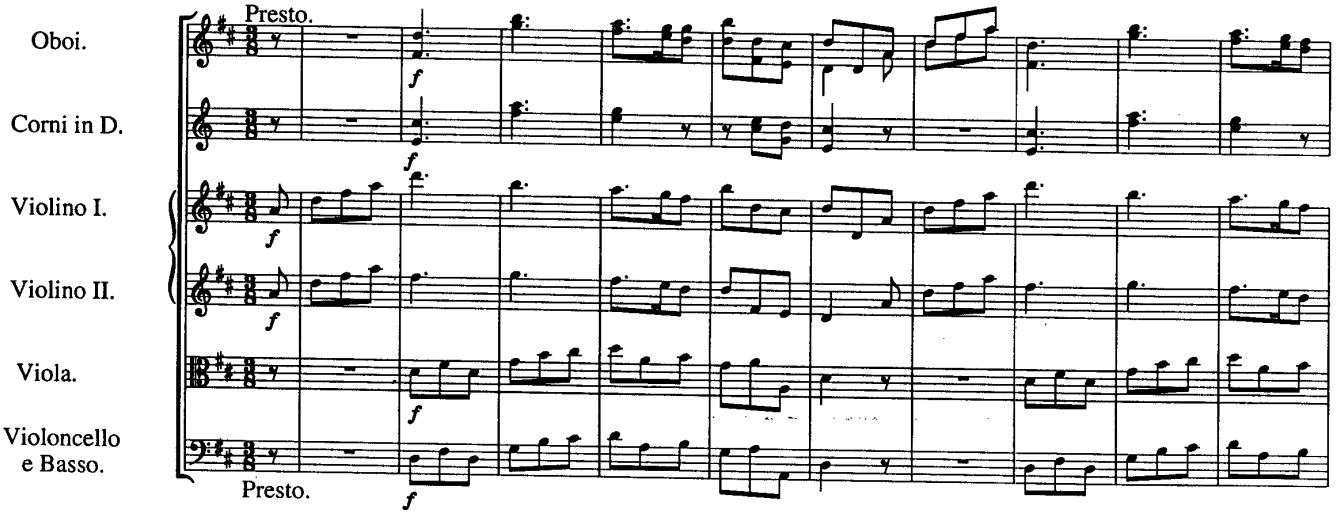
Corni in D.

Violino I.

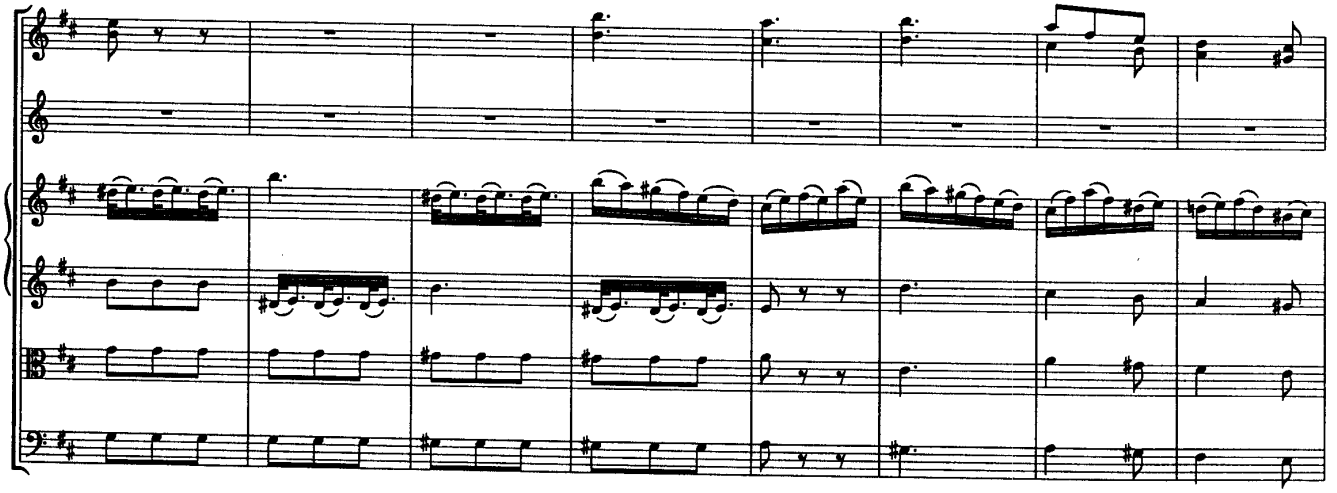
Violino II.

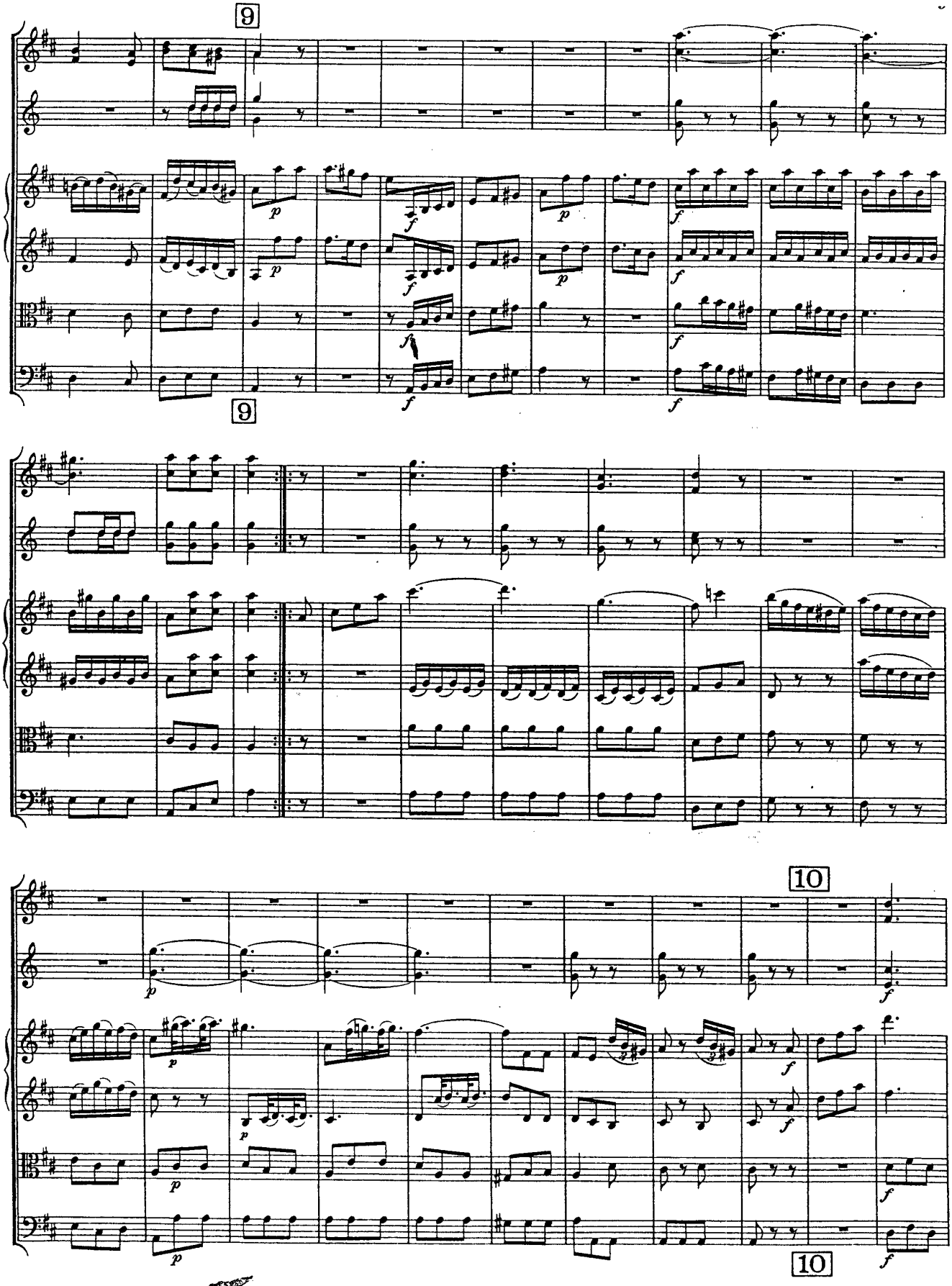
Viola.

Violoncello e Basso.



Presto.

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9
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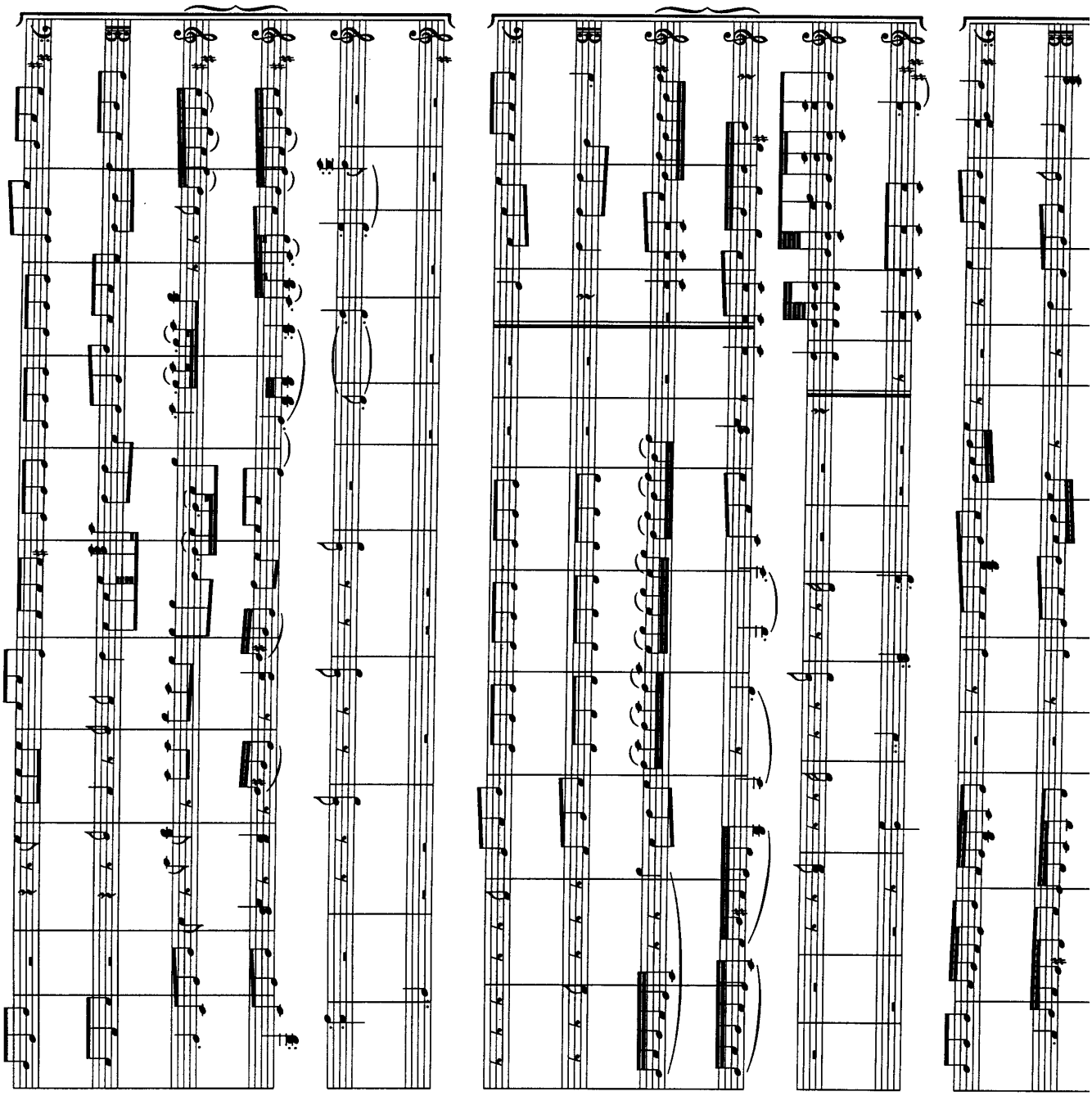

```
IN  1 0 0 .70

BA/K2S/E3/C3/D3/M4/A2/A3/A3/M4/A3/A3/A3/M4
/A3/A3/A3/M4/A3/A3/A3/M4/GS3/
G3/G3/M4/A3/A2/A2/M4/A2/A2/A2/M4/A2/R/R/M4
/RW/M4/D3/F3/D3/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/4.
/8/8/8;
;
1 3/4 6/7 9/10 12/13 15/16 18/19 21/22 24/26 28;
;
14 1 0 6 9
14 1 0 6
IN  2 0 0 .70

AL/E4/C4/D4/A3/C4/C4/D4/B3/B3/A3/E4/E4/D4/A3
/A3/D3/D3:F3:A3/G3/B3/B3/A3/
D4/C4/R/D4/C4/R/R/RW/D4/F4/D4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/16/8/128/8/8/4/8/8/8/4/8/
8/4/4./8/8/8;
;
1 3/4 6/7 9/10 12/13 15/16 20/26 28;
;
IN  3 0 0 .70

TR/K2S/C5/E5/G5/E5/F5/D5/C5/R/R/B3:D4/C4/D4/
C4/D4/C4/D4/C5/D5/C5/D5/D5/
D4/D4/D4/C4/B3/C4/C4/R/B3:B3:D4/C4/R/A4/D5/F
5/A5/F5;
16/16/16/16/16/16/8/8/8/8/32/16./32/16./4./8/32/16./1
6/16./8/8/8/8/8/8/
8/8/8/8/8/8/8/8/8/8/4.;
;
1 6/8 12/14 18/19 21/22 24/25 26/30 32;
01 02/03 04/05 06/09 10/11 12/15 16/17 18;
14 3 0 2 8 0 -1
IN  4 0 0 .70

TR/K2S/C5/D5/G5/E5/F5/D5/C5/G5/A5/G5:B5/A5/G
5:B5///F5/F5/F4/F4/F4/E4/D5/
B4/GS4/D5:A4/R/D5/B4/GS4/R/C5:A4/R/B4:D5:A4/
D5/F5/A5/D6:F6;
16/16/16/16/16/16/8/32/16./32/16./4./16/16/4./8/8/8/8/
8/16/16/16/4/8/16/
16/16/8/4/8/4/8/8/8/4.;
;
1 6/7 11/13 14/16 18/19 20/21 23/25 27/30 32;
03 04/05 06/08 09/10 11/12 15/15 16/21 23/25 27;
IN  5 0 0 .70

TR/RW/M2/G4:B3:F3:B3/M2/F4:G5/M2/G4:G5/M2/
G5/M2/RW/M2/G4:G5/R/R/M2/G4:G5/
R/R/M2/G4:G5/R/R/M2/RW/M2/E4:C5/M2;
4./8./4./4./8./4./8/8/8/8/8/8/8/8/8/4./4.;
;
;
01 02/03 04/01 02/03 04;
IN  6 0 0 .70

TR/K1S/RW/RW/RW/RW/RW/RW/RW/RW/RW/R
W/D5;
4./4./4./4./4./4./4./4./4./4..;
;
;
;
IN  7 0 0 .70

BA/E3/E3/E3/M4/A2/C3/E3/M4/A3/MH4/RW/M4/R
W/M4/A3/A3/A3/M4/A3/A3/A3/M4/
A3/A3/A3/M4/D3/E3/F3/M4/G3/R/R/M4/R/R/R/M4;
8/8/8/8/8/8/4/4./4./8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8;
;
1 3/4 6/8 10/11 13/14 16/17 19;
;
14 7 0 6 9
14 7 0 6
IN  8 0 0 .70

AL/D4/C4/A3/A3/A3/R/RW/RW/A4/A4/A4/A4/A4/
A4/A4/A4/A4/D4/E4/F4/R/R/R/F4/
R/R;
4./8/8/8/4/4/4./4./8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8;
;
2 4/6 8/9 11/12 14/15 17;
;
IN  9 0 0 .70

TR/GS4/B4/G4/B4/G4/B4/A4/C5:A5:A5/C5:A5/C5:
A5/RW/RW/E4/G4/E4/G4/E4/G4/
D4/F4/D4/F4/D4/F4/C4/E4/C4/E4/C4/E4/F4/G4/A4/
D4/R/R/A5/F5/E5/D5/C5/D5;
16/16/16/16/16/16/8/8/8/4/4./4./16/16/16/16/16/16/16/
16/16/16/16/16/16/
16/16/16/16/16/8/8/8/4/8/8/16/16/16/16/16;
;
1 6/7 9/11 16/17 22/23 28/29 31/33 38;
11 12/13 14/15 16/17 18/19 20/21 22/23 24/25 26/27
28/32 38;
14 9 0 2 8 0 -1
IN  10 0 0 .70

TR/R/B4/GS5/B4/G5/B4/G5/A4/C5:A5/C5:A5/C5:A5
/R/B4:D5:A4/C5/E5/A5/C6/D6/
G5/R/C6/B5:D6/G5/F5/E5/DS5/E5/A5/F5/E5/D5/C5/
D5;
4/16/16/16/16/16/16/8/8/8/4/8/4/8/8/8/4./4./4./8/4/16/1
6/16/16/16/16/16/
16/16/16/16/16;
;
1 6/7 9/12 14/19 24/25 30;
15 16/17 18/19 24/25 30;
IN  11 0 0 .70

TR/D5/F4:D5:C4/D5:A5:A5/G4:C4:D5:C4/D5/F4:E4:
D5/D5:A5:A5/D5/M2/G4:G5/G4:G5/
G4:G5/M2/G4:G5/MH2/R/RW/M2/RW/M2/G5/R/R/
M2/G4:G5/R/R/M2/G5/R/R/M2/C5:E5/
R/R/M2/RW/M2/RW/M2;
8/8/16/16/16/8/128/128/16/128/128/4/4/4./4./16/8/8/8/
8/8/16/8/8/8/8/8/
4./4.;
;
1 8/9 11;
;
IN  12 0 0 .70

TR/K3S/A4:G5/C5:A5/C5:A5/C5:A5/C5:A5/R/RW/R
W/C5:G5/D5:F5/C5/F4:D5/R/RW/
RW;
4./8/8/8/4/8/4./4./4./4./4./4./8/4./4.;
;
2 4;
99 01;
IN  13 0 0 .70

BA/K1S/D3/F3:G3:C3/M4/D3/E3/E3/M4/A2/R/M4/R
W/M4/R/A2/B2/C3/D3/M4/E3/F3/
G3:B3:D4/G3/G3/M4/A3/R/M4/RW/M4/A3/C4/B3:D
4/A3/G3/M4/F3/A3/G3/F3/E3/M4/
D3/D3/D3/M4;
4/4/8/8/8/4/8/4./8/16/16/16/8/8/8/8/8/4/8/4./8/16/16
/16/16/8/16/16/
16/16/8/8/8;
;
3 5/7 10/11 15/17 21/22 26/27 29;
;
14 13 0 6 9
14 13 0 6
IN  14 0 0 .70

AL/E4:G4:B4/D4/C4/D4/E4/E4/A3/R/RW/R/A3/B3/
C4/D4/E4/F4/G4/A4/R/RW/A4/C5/
B4/A4/G4/F4/A4/GS4/F4/E4/F4;
4/4/8/8/8/8/4/8/4./8/16/16/16/8/8/8/4/8/4./8/16/16/1
6/16/8/16/16/16/
16/4.;
;
4 6/8 11/12 14/16 20/21 25;
;
IN  15 0 0 .70

TR/K2S/F4/E4/E4/F4/D4/E4/C4/D4/C4:G3:B3/A3/F5
/F5/F5/E5/D5/C5/A3/B3/C4/
D4/E4/F4/G4/A4/D5/D5/D5/C5/B4/A4/C5/A4/C5/A4
/C5/A4/C5/A4/C5/A4/C5/A4/B4/
A4/B4/A4/B4;
4/8/8/16/16/16/16/16/16/8/8/8/8./16/8/8/16/16/16/16/8
/8/8/8/8/8/8./16/
8/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/1
6/16;
;
2 3/4 9/10 12/13 15/16 20/21 23/24 26/27 29/30
35/36 41/42 47;
04 05/06 07/08 09;
14 15 0 2 8 0 -1
IN  16 0 0 .70

TR/K2S/BN4/C5/D5/B4/GS4/A4/F4/D5/C5/A4/B4/G
4/A4/A5/A5/A5/GS5/F5/E5/A3/
B3/C4/D4/E4/F4/GS4/A4/F5/F5/F5/E5/D5/C5/A5/C5/
A5/C5/A5/C5/A5/C5/A5/C5/C5/
A5/B4/A5/B4/A5/B4/A5;
16/16/16/16/16/16/16/16/16/16/16/16/8/8/8/8./16/8/8/
16/16/16/16/8/8/8/
8/8/8/8./16/8/16/16/16/16/16/16/16/16/16/16/16/16/16/16
/16/16/16/16/16;
;
1 6/7 12/13 15/16 18/19 23/24 26/27 29/30 32/33
38/39 44/45 50;
01 02/03 04/05 06/09 10;
IN  17 0 0 .70

TR/RW/M2/R/D5:A5:C6/E4:G4:D5/D5:A5:C6:A5/C
4:C4:E4/D5:A5:C6:A5/F4:E4:G4/
D5:A5/E4:G4:D5/M2/G4/G5/R/M2/RW/M2/RW/M2/
RW/M2/RW/M2//M2/G4:G5/R/R/M2/
G4:G5/R/R/M2/R/R/R/M2;
4./8/16/16/16/16/16/128/128/4/4/8/4./4./4./4./1/8/8/
8/8/8/8/8/8/8/8;
;
1 8;
;
IN  18 0 0 .70

TR/K1S/F4:B4/C5:E5:A4/B4:D5/G4:B4:D5/GS4:B4:
D5/R/RW/RW/RW/R/RW/RW/C5:A5/
C5:A5/B4:A5;
4/4/8/8/8/4/4./4./4./4./4./4./4./4./4.;
;
3 5;
06 07/06 07/06 07/07 08/08 99;
z
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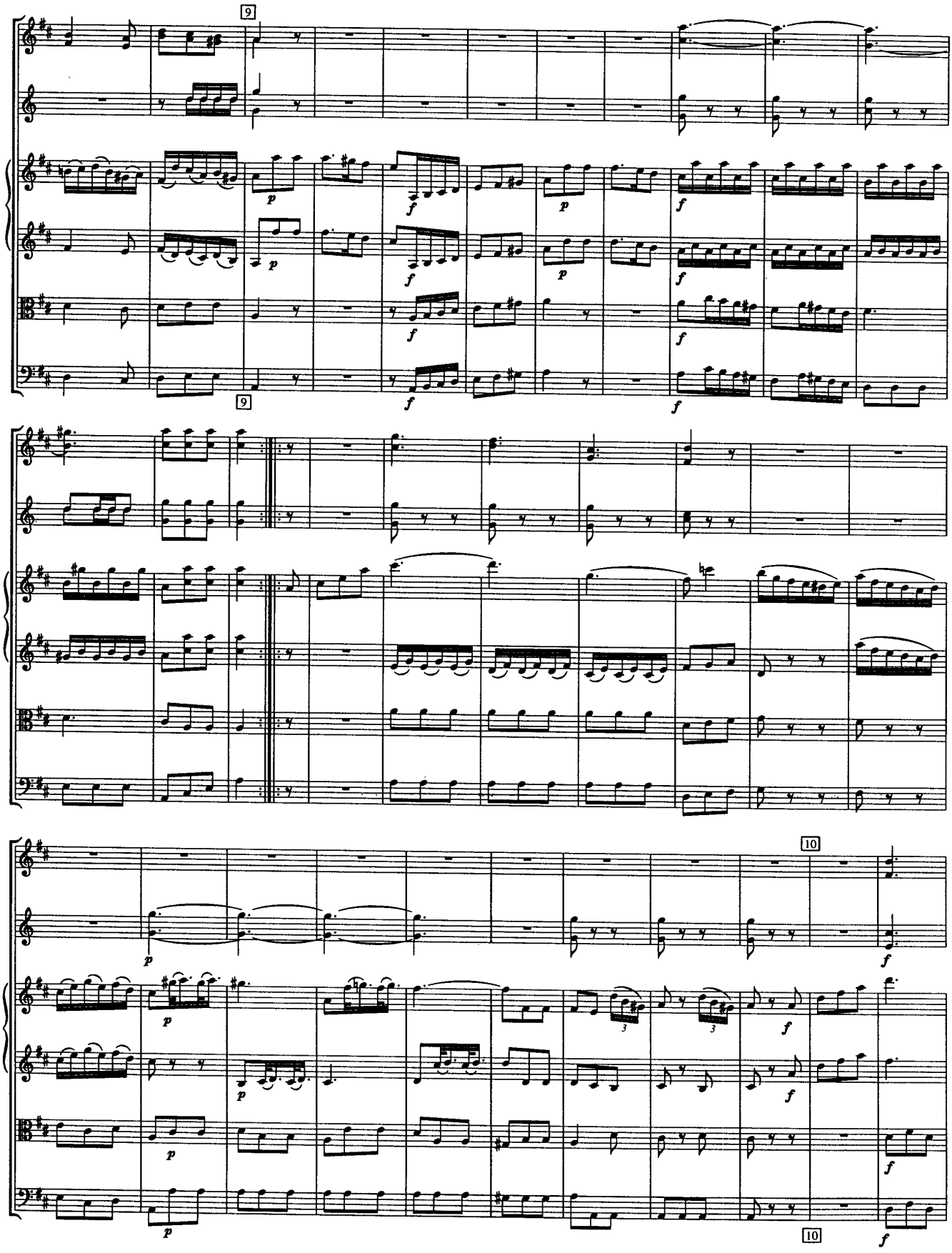
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9
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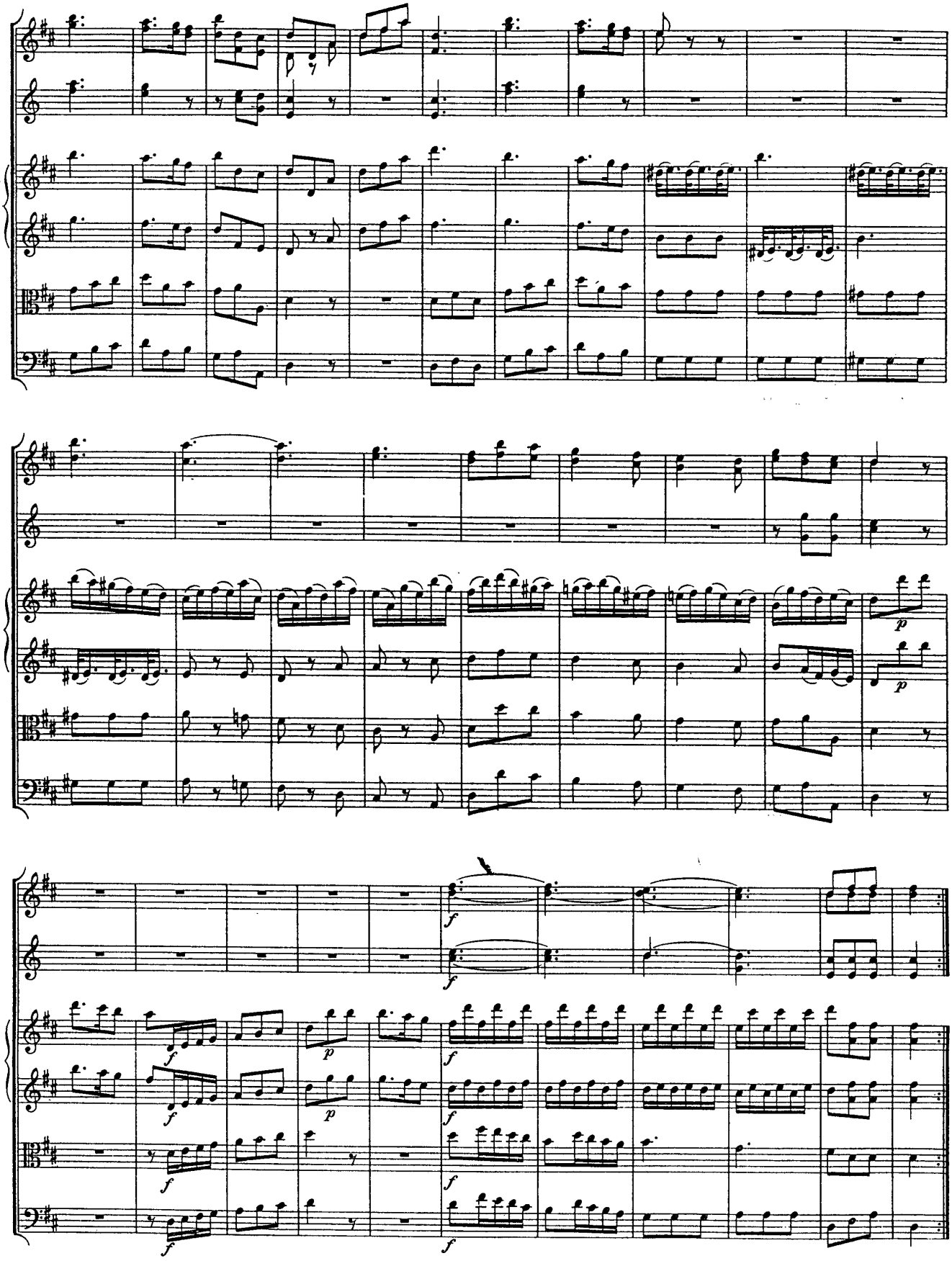
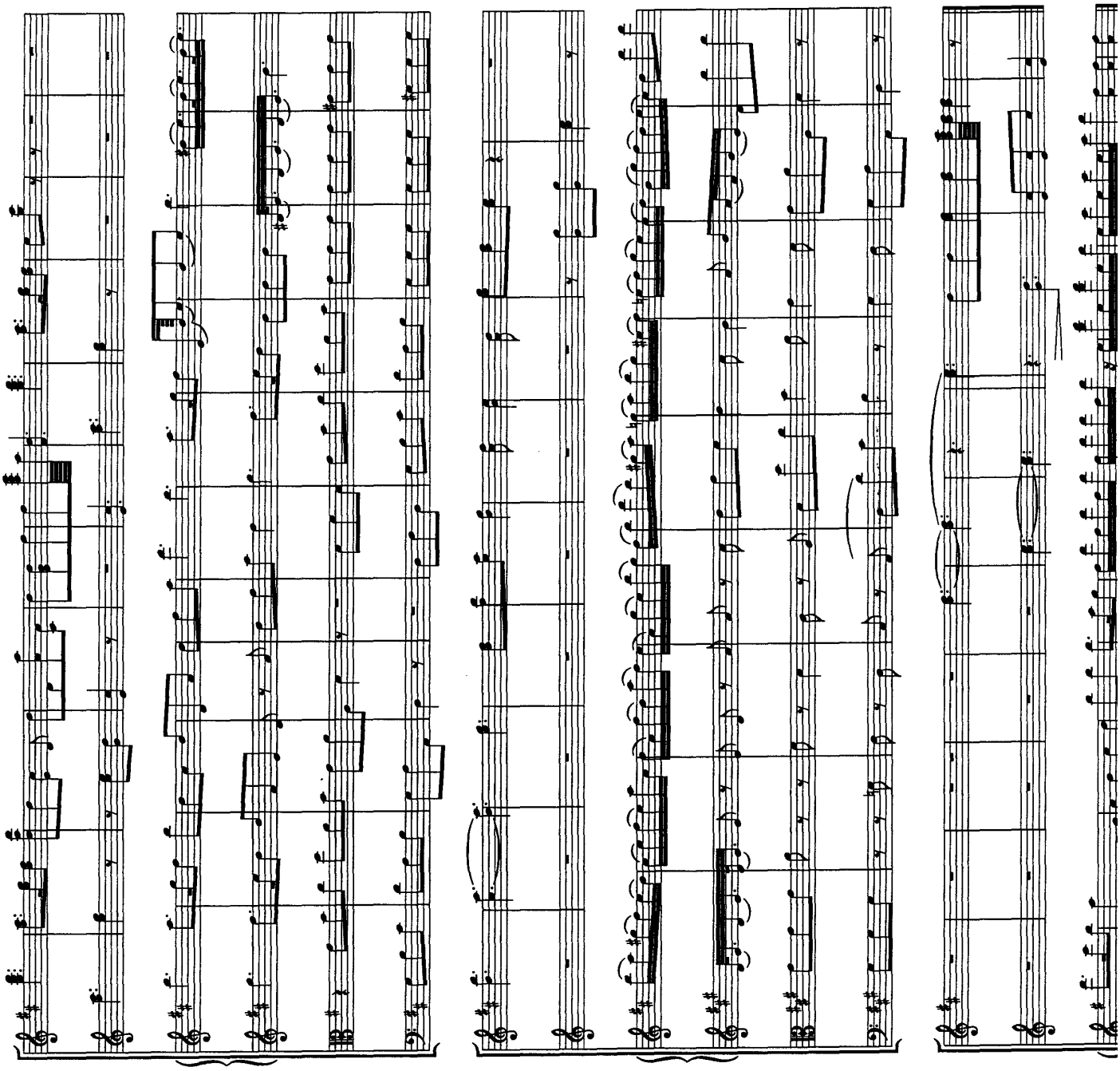
10





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IN 1 0 0 .70

BA/K2S/RW/M4/R/D3/E3/F3/G3/M4/A3/B3/C4/M4/
D4/R/M4/RW/M4/D4/F4/E4/D4/C4/
M4/B3/D4/C4/B3/A3/M4/G3/G3/G3/M4/A3/A3/A3/
M4/D3/F3/A3/M4/D3/MH4;
4./8/16/16/16/16/8/8/8/4/8/4./8/16/16/16/16/8/16/16/1
6/16/8/8/8/8/8/8/
8/8/8/4;
;
1 4/5 7/9 13/14 18/19 21/22 24/25 27;
;
14 1 0 6 9
14 1 0 6
IN 2 0 0 .70

AL/K2S/RW/R/D4/E4/F4/G4/A4/B4:B4/C5/D5/R/R
W/D5/F5/E5/D5/C5/B4/D5/C5/B4/
A4/B4/G4/F4/D4/D4/D4;
4./8/16/16/16/16/8/8/8/4/8/4./8/16/16/16/16/8/16/16/1
6/16/4./4./8/8/8/
4;
;
1 4/5 7/9 13/14 18/21 23;
;
IN 3 0 0 .70

TR/K2S/B5/A5/G5/F5/D4/E4/F4/G4/A4/B4/C5/D5/G
5/G5/G5/F5/E5/D5/F5/D5/F5/
D5/F5/D5/F5/D5/F5/D5/F5/D5/F5/D5/E5/D5/E5/D5/E5/C5/
E5/C5/E5/C5/E5/D5/A4:F5/A4:F5/
A4:F5;
8./16/8/8/16/16/16/16/8/8/8/8/8/8/8/8./16/8/16/16/16/16/
16/16/16/16/16/16/
16/16/16/16/16/16/16/16/16/16/16/16/16/16/8/8/8/4;
;
1 3/4 8/9 11/12 14/15 17/18 23/24 29/30 35/36 41/42
44;
;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/K1N/D6/C6/B5/A5/C4:E4/E4/F4/G4/A4/B4/C5/D
5/B5/B5/B5/A5/G5/F5/D6/F5/
D6/F5/D6/F5/D6/D6/F5/D6/R/E5/D6:F6/E5/D6:F6/E
5/D6/E5/C6/E5/C6/E5/C6/D6/
A4:F5/A4:F5/A4:F5;
8./16/8/8/16/16/16/16/8/8/8/8/8/8/8./16/8/16/16/16/16/
16/16/16/16/16/16/
16/16/16/16/16/16/16/16/16/16/16/16/16/16/8/8/8/4;
;
1 3/4 8/9 11/12 14/15 17/18 23/24 28/29 34/35 40/41
43;
;
IN 5 0 0 .70

TR/RW/M2/RW/M2/RW/M2/RW/M2/RW/M2/C5:E5
/M2/C5:E5/M2/M2/R/G4:D5/M2/E4:C5/
E4:C5/C5/M2/E4:C5/MH2;
4./4./4./4./4./4./4./4./8/8/8/4;
C- 2.6 3.0;
4 6;
01 02/01 02;
IN 6 0 0 .70

TR/K2S/RW/RW/RW/RW/RW/D5:F5/D5:F5/R/C5:E
5/D5/D5/D5:F5/D5:F5/D5:F5:A5:A5/
D5:F5/D5:F5/R;
4./4./4./4./4./4./4./4./4./8/8/8/8/128/128/4/8;
;
4 9;
01 02/02 03/02 03/02 03;
IN 7 0 0 .70

BA/K3S/G3/G3/G3/M4/R/R/GN3/M4/F3/R/D3/M4/C
3/R/A2/M4/D3/D4/C4/M4/B3/R/M4/
G3/F3/M4/G3/A3/A2/M4/D3/R/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/4/8/4/8/8/8/4/8;
;
1 3/9 11/15 17;
08 10;

14 7 0 6 9
14 7 0 6
IN 8 0 0 .70

AL/K3S/G4/G4/G4/A4/R/R/F4/R/D4/C4/R/A3/D4/D5
/C5/B4/A4/G4/F4/G4/A4/A3/D4/
R;
8/8/8/8/8/8/8/4/8/8/8/8/8/8/4/8/4/8/8/8/8/4/8;
;
1 3/9 11/16 18;
;
IN 9 0 0 .70

TR/K3S/D4/E4/D4/E4/D4/E4/E4/R/E4/D4/R/A4/A4/
R/C5/D5/F5/E5/D5/C5/B4/A4/
B4/A4/F4/G4/E4/D4/B5/B5;
32/16./16/16./32/16./8/8/8/8/8/8/8/8/8/8/8/4/8/4/8/8/
16/16/16/16/8/8/
8;
;
1 6/13 15/20 24/25 27;
01 02/03 04/05 06/21 22/23 24;
14 9 0 2 8 0 -1
IN 10 0 0 .70

TR/K2S/B5/A5/GS5/F5/E5/D5/C5/E5/F5/E5/A5/C5/
D5/A4/F5/D5/A5/F5/E5/A4/G5/
E5/B5/G5/F5/B5/D6/B5/GS5/A5/GN5/A5/B5/G5/ES5
/F5/EN5/F5/G5/E5/C5/D5/B4/
G5/F5/D5/E5/C5/D5/D6/D6;
16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/
16/16/16/16/16/16/16/
16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/16/
16/16/16/16/16/16/16/
8/8/8;
;
1 6/7 12/13 18/19 24/25 30/31 36/37 42/43 48/49 51;
01 02/03 04/05 06/07 08/09 10/13 14/15 16/17 18/19
20/21 22/23 24/25 26/
27 28/29 30/31 32/33 34/35 36/37 38/39 40/41 42/43
44/45 46/47 48;
IN 11 0 0 .70

TR/RW/M2/RW/M2/RW/M2/RW/M2/RW/M2/RW/
M2/RW/M2/R/G4:G5/G4:G5/M2/C5:E5/R/
M2;
4./4./4./4./4./4./4./8/8/8/4/8;
;
1 2;
;
IN 12 0 0 .70

TR/K2S/D5:B5/C5:A5/D5:A5/E5:G5/D5:F5/F5:B5/E
5:A5/D5:G5/C5:F5/B4:E5/A4:D5/
E5:G5/D5:F5/C5:E5/R/RW;
4./4./4./4./8/8/8/4/8/4/8/8/8/8/4/4.;
;
5 7/12 14;
02 03;
IN 13 0 0 .70

BA/K2S/G3/B3/C4/M4/D4/A3/B3/M4/G3/A3/A2/M4
/D3/R/M4/RW/M4/D3/F3/D3/M4/G3/
B3/C4/M4/D4/A3/B3/M4/G3/G3/G3/M4/G3/G3/G3/
M4/GS3/G3/G3/M4;
8/8/8/8/8/8/8/8/8/4/8/4./8/8/8/8/8/8/8/8/8/8/8/8/8/8/8
/8/8;
;
1 3/4 6/7 9/11 13/14 16/17 19/20 22/23 25/26 28;
;
14 13 0 6 9
14 13 0 6
IN 14 0 0 .70

AL/K1S/R/G4/B4/C5/D5/A4/B4/G4/A4/A3/D4/R/R
W/D4/F4/D4/G4/B4/C5/D5/A4/B4/
G4/G4/G4/G4/G4/G4/GS4/G4/G4;
4/8/8/8/8/8/8/8/8/8/8/4/8/4./8/8/8/8/8/8/8/8/8/8/8/8/8
/8/8/8;
;
1 3/4 6/7 9/11 13/14 16/17 19/20 22/23 25/26 28;
;
IN 15 0 0 .70

TR/K2S/G5/F5/E5/D5/D5/F4/E4/D4/R/A4/D5/F5/A5/
F5/G5/F5/E5/D5/B4/B4/B4/DS4/
E4/D4/E4/D4/E4/B4;
4./8./16/8/8/8/8/8/8/8/8/8/4/4./8./16/8/8/8/8/32/16./1
6/16./16/16./4.;
;
2 4/5 7/10 12/15 17/18 20/21 26;
21 22/23 24/25 26;
14 15 0 2 8 0 -1
IN 16 0 0 .70

TR/K2S/B5/A5/G5/F5/B5/D5/C5/D5/D4/A4/D5/F5/A
5/D6/B5/A5/G5/F5/E4/D5/E5/
D5/E5/B5/DS5/E5/D5/E5/D5/E5;
4./8./16/8/8/8/8/8/8/8/8/8/4./4./8./16/8/16/128/8./8/8/
4./16/16./32/
16./32/16.;
;
2 4/5 7/8 10/11 13/16 18/19 23/25 30;
19 20/20 21/22 23/25 26/27 28/29 30;
IN 17 0 0 .70

TR/F5:A5/M2/E5:G5/R/M2/R/C5:E5/G4:D5/M2/E4:
C5/R/M2/RW/M2/E4:C5/M2/F5:A5/
M2/E5:G5/R/M2/RW/M2/RW/M2/RW/M2;
4./4/8/8/8/8/4/8/4./4./4./4/8/4./4./4.;
;
3 4;
;
IN 18 0 0 .70

TR/K2S/G5:B5:D6/F5:A5/E5:G5/D5:F5/D5:A5:D6/D
5/E4:C5/D4/D5/D4/A4:A5:A5/
A4:C4/D5/G4:E4:D5/F5/F5/A5:C6:E6:C6:E6/A5/F4:
D5/G5:B5:D6/F5:A5/E5:G5/D5:F5/
E5/G5:C6/R/R/RW/RW;
4./8./16/8/8/8/8/8/8/8/8/8/8/8/8/128/128/4./4./8./16/8
/8/8/8/8/4./4.;
;
2 4/5 7/9 12/13 18/21 23/24 25;
;
z
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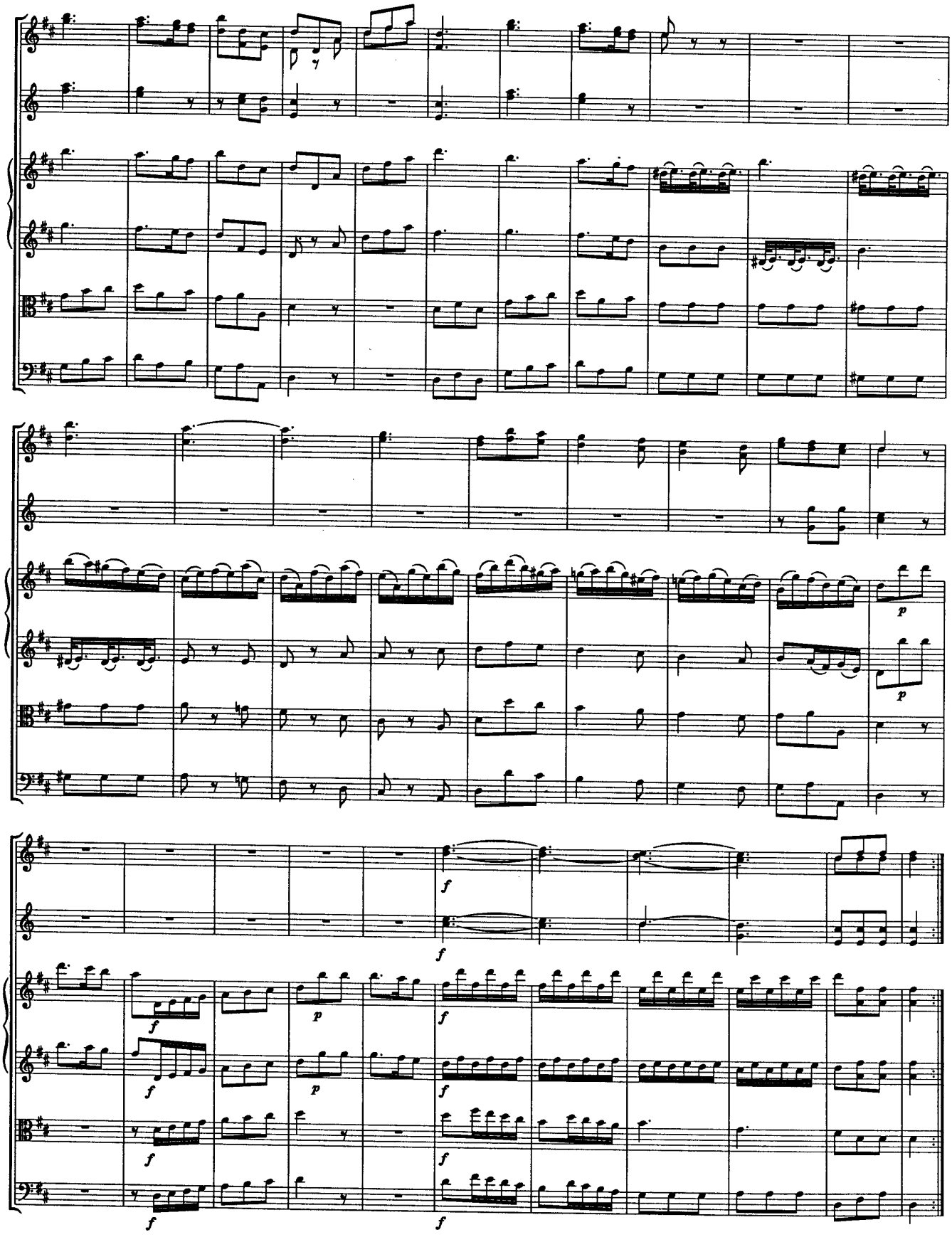
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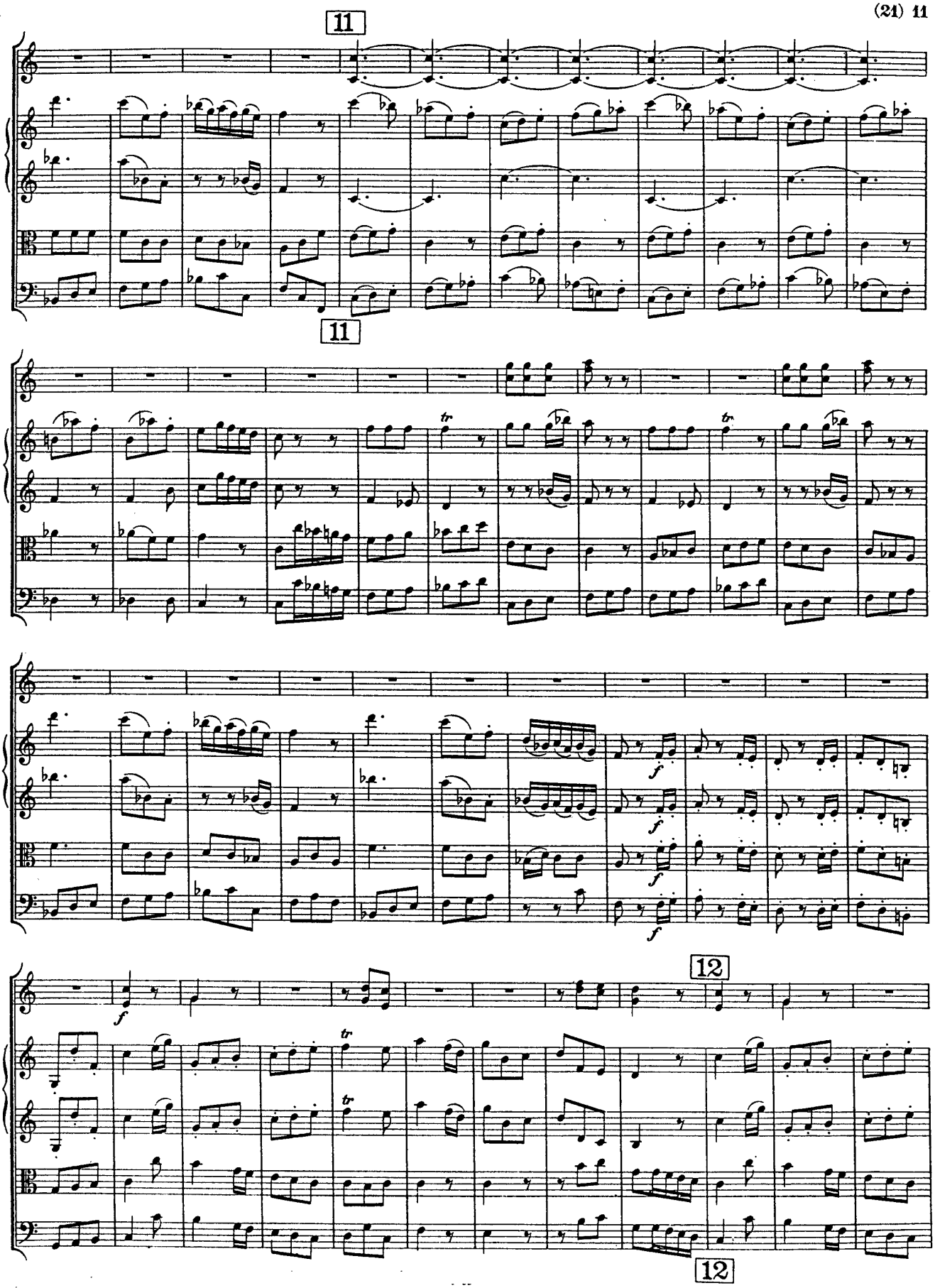
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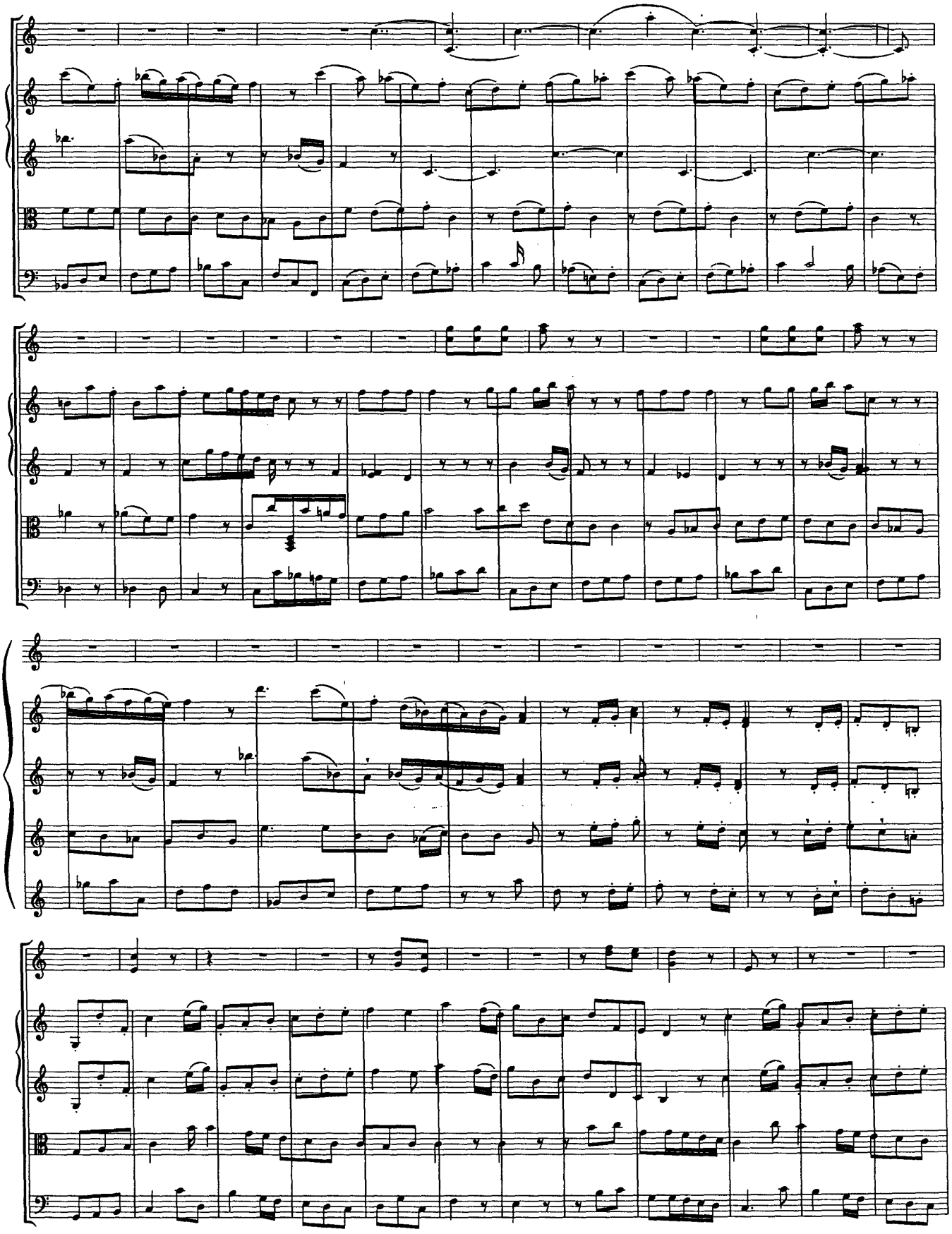
12
12



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IN 1 0 0 .70

BA/G2/A2/B2/M4/C3/C4/D3/M4/B3/G3/F3/M4/E3/D
3/C3/M4/D3/G3/C3/M4/F3/R/M4/
E3/R/M4/R/B3/C4/M4/G3/G3/F3/E3/D3/M4/C3/C4/
M4/B3/G3/F3/M4/E3/D3/C3/M4;
8/8/8/4/8/8/4/16/16/8/8/8/8/8/8/4/8/4/8/8/8/8/16/16/1
6/16/4./8/4/16/
16/8/8/8;
;
1 3/5 6/8 9/10 12/13 15/18 19/20 24/28 29/30 32;
;
14 1 0 5 9
14 1 0 5
IN 2 0 0 .70

AL/G3/A3/B3/C4/B4/B4/G4/F4/E4/D4/C4/C4/B3/C4/
C4/R/C4/R/R/B4/C5/G4/G4/F4/
E4/D4/C4/C5/B4/G4/F4/E4/D4/C4;
8/8/8/4/16/4/16/16/8/8/8/8/8/8/4/8/4/8/8/8/8/16/16/1
6/16/4/8/4/16/16/
8/8/8;
;
1 3/7 8/9 11/12 14/17 18/19 23/27 28/29 31;
;
IN 3 0 0 .70

TR/G3/D5/F4/C5/E5/G5/G4/A4/B4/C5/D5/E5/F5/E5/
A5/F5/D5/G5/B4/C5/D5/D4/C4/
B3/R/C5/E5/G5/G4/A4/B4/C5/D5/E5;
8/8/8/4/16/16/8/8/8/8/8/8/4/8/4/16/16/8/8/8/8/8/4/8/4
/16/16/8/8/8/8/
8/8;
S 1/S 2/S 3/S 7/S 8/S 9/S 10/S 11/S 12/S 28/S 29/S
30/S 32/S 33;
1 3/5 6/7 9/10 12/16 17/18 20/21 23/26 27/28 30/31
33;
05 06/16 17/26 27;
14 3 0 2 8 0 -1
IN 4 0 0 .70

TR/G3/D5/F4/C5/E5/G5/G4/A4/B4/C5/D5/E5/F5/E5/
A5/F5/D5/G5/B4/C5/D5/F4/E4/
D4/R/C5/E5/G5/G4/A4/B4/C5/D5/E5;
8/8/8/4/16/16/8/8/8/8/8/8/4/4/4/16/16/8/8/8/8/8/8/4/8/4
/16/16/8/8/8/8/
8/8;
S 1/S 2/S 3/S 7/S 8/S 9/S 11/S 12/S 28/S 30/S 31/S
32/S 33;
1 3/5 6/7 9/10 12/16 17/18 20/21 23/26 27/28 30/31
33;
05 06/16 17/26 27;
IN 5 0 0 .70

TR/RW/M1/E4:C5/R/M1/R/RW/M1/RW/M1/R/G4:D
5/E4:C5/M1/RW/M1/RW/M1/R/D5:F5/
C5:E5/M1/G4:D5/R/M1/E4/R/M1/R/RW/M1/RW/M1
;
4./4/8/4/4./4./8/8/8/4./4./8/8/8/4/8/8/8/8/4./4.;
;
2 3/4 5;
;
IN 6 0 0 .70

M4/TR/M4/GF5/A5/A4/M4/D5/F5/D5/M4/GF4/B4/C
5/M4/D5/E5/F5/M4/R/R/A5/M4/D5/
R/D5/E5/M4/F5/R/D5/C5/M4/R/R/B4/C5/M4/D5/B4/
GN4/M4;
8/8/8/8/8/8/8/8/8/8/8/8/8/8/8/16/16/8/8/16/16/8/8/1
6/16/8/8/8;
S 15/S 16/S 17/S 18/S 19/S 20/HW 21/S 22/S 23/S
24;
1 3/4 6/7 9/10 12/15 16/18 19/20 21/22 24;
;
14 6 0 5 8 0 -1
IN 7 0 0 .70

TR/C5/B4/AF4/G4/B4/G4/E5/E5/B4/B4/AF4/C5/B4/
B4/G4/R/E5/F5/G5/R/E5/D5/C5/
R/C5/D5/E5/C5/AN4;
8/8/8/8/8/8/4./8/8/8/16/16/8/8/8/8/16/16/8/8/16/16/8/8/
16/16/8/8/8;
S 16/S 17/S 18/S 19/S 20/HW 22/S 23/S 24/HW
25/S 26;
1 3/4 6/8 10/11 12/13 14/16 17/19 20/22 23/24 26;
11 12;
IN 8 0 0 .70

TR/R/R/BF4/G4/F4/R/BF5/A5/BF4/A4/BF4/G4/A4/F
4/G4/E4/A4:F4/R/F4/G4/B4:A4/
R/F4/E4/F4:D4/R/D4/E4/F4/D4/BN3;
8/8/16/16/4/8/4./8/8/8/16/16/16/16/16/4/8/16/16/8/
8/16/16/4/8/16/16/
8/8/8;
HW 7/S 15/S 16/S 17/S 18/S 19/S 20/S 21/S 22/S
23/S 24/S 25;
1 2/5 7/8 13/15 16/18 19/21 22/23 25;
01 02/05 06/08 09/10 12/12 13;
IN 9 0 0 .70

TR/BF5/G5/A5/F5/G5/E5/F5/R/D6/C6/E5/F5/D5/BF4
/C5/A4/B4/G4/A4:F4/R/F4/G4/
C5:A4/R/F4/E4/F4:D4/R/D4/E4/F4/D4/BN3;
16/16/16/16/16/16/4/8/4./8/8/8/16/16/16/16/16/4/8/
16/16/4/8/16/16/4/
8/16/16/8/8/8;
S 11/S 19/S 20/S 22/S 23/S 24/S 25/S 26/S 27/S
28/S 29;
1 6/9 11/12 17/19 20/22 23/25 26/27 29;
99 01/01 02/03 05/05 06/09 10/12 13/14 15/16 17;
IN 10 0 0 .70

TR/RW/M1/RW/M1/RW/M1/RW/M1/RW/M1/RW/
M1/RW/M1/RW/M1/RW/M1/RW/M1/RW/M1;
4./4./4./4./4./4./4./4./4./4./4./4.;
;
;
;
IN 11 0 0 .70

BA/DF3/R/M4/DF3/D3/M4/C3/R/M4/C3/C4/BF3/AN
3/G3/M4/F3/G3/A3/M4/BF3/C4/D4/
M4/C3/D3/E3/M4/F3/G3/A3/M4/F3/G3/A3/M4/BF3/
C4/D4/M4/C3/D3/E3/M4/F3/G3/
A3/M4;
4/8/4/8/4/8/8/16/16/16/16/8/8/8/8/8/8/8/8/8/8/8/8/8/8
/8/8/8/8/8/8/8/
8/8;
;
5 9/10 12/13 15/16 18/19 21/22 24/25 27/28 30/31
33;
;
14 11 0 5 9
14 11 0 5
IN 12 0 0 .70

AL/AF4/R/AF4/F4/F4/G4/R/C4/C5/D3:B2:F3/B4/AN
4/G4/F4/G4/A4/B4/B4/C5/D5/
E4/D4/C4/C4/R/A3/BF3/C4/D4/E4/F4/E4/D4/C4/C4/
BF3/A3;
4/8/8/8/8/4/8/8/8/16/16/16/16/16/8/8/8/2/8/8/8/8/8/8/4/8/
8/8/8/8/8/8/8/8/8/
8/8/8/8;
;
2 4/6 11/12 14/16 18/19 21/23 25/26 28/29 31/32 34;
02 03;
IN 13 0 0 .70

TR/F4/R/F4/R/C5/G5/F5/E5/D5/C5/R/R/F4/FF4:E4/
D4/R/R/R/B4/B4/G4/F4/R/R/
F4/EF4/D4/R/R/R/BF4/G4/G4:A4:F4/R/R;
4/8/4/8/8/8/16/16/16/16/16/8/8/4/4/4/8/8/8/4/16/16/8/8/8
/4/4/4/8/8/8/16/
16/4/8/8;
;
3 7/13 14/19 20;
13 14/19 20;
14 13 0 2 8 0 -1
IN 14 0 0 .70

TR/BN4/A5/F5/B4/A5/F5/E5/G5/F5/E5/D5/C5/R/R/F
5/F5/F5/F5/R/G5/G5/G5/B5/
A5/R/R/F5/F5/F5/R/G5/G5/G5/B5/A5/C5/R/R;
8/8/8/8/8/8/8/8/16/16/16/16/8/8/8/8/8/8/8/4/4/8/8/8/16/16/8/
8/8/8/8/8/4/4/8/8/
8/16/16/8/8/8/8;
S 3/S 6;
1 3/4 6/7 11/13 15/17 18/19 20/22 24/26 27/28 29/30
31;
;
IN 15 0 0 .70

TR/RW/M1/RW/M1/RW/M1/RW/M1/RW/M1/RW/
M1/C5:G5/C5:G5/C5:G5/M1/F5:A5/R/R/
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23/24 25/27 28/30 31;
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08/08 09/08 09;
z
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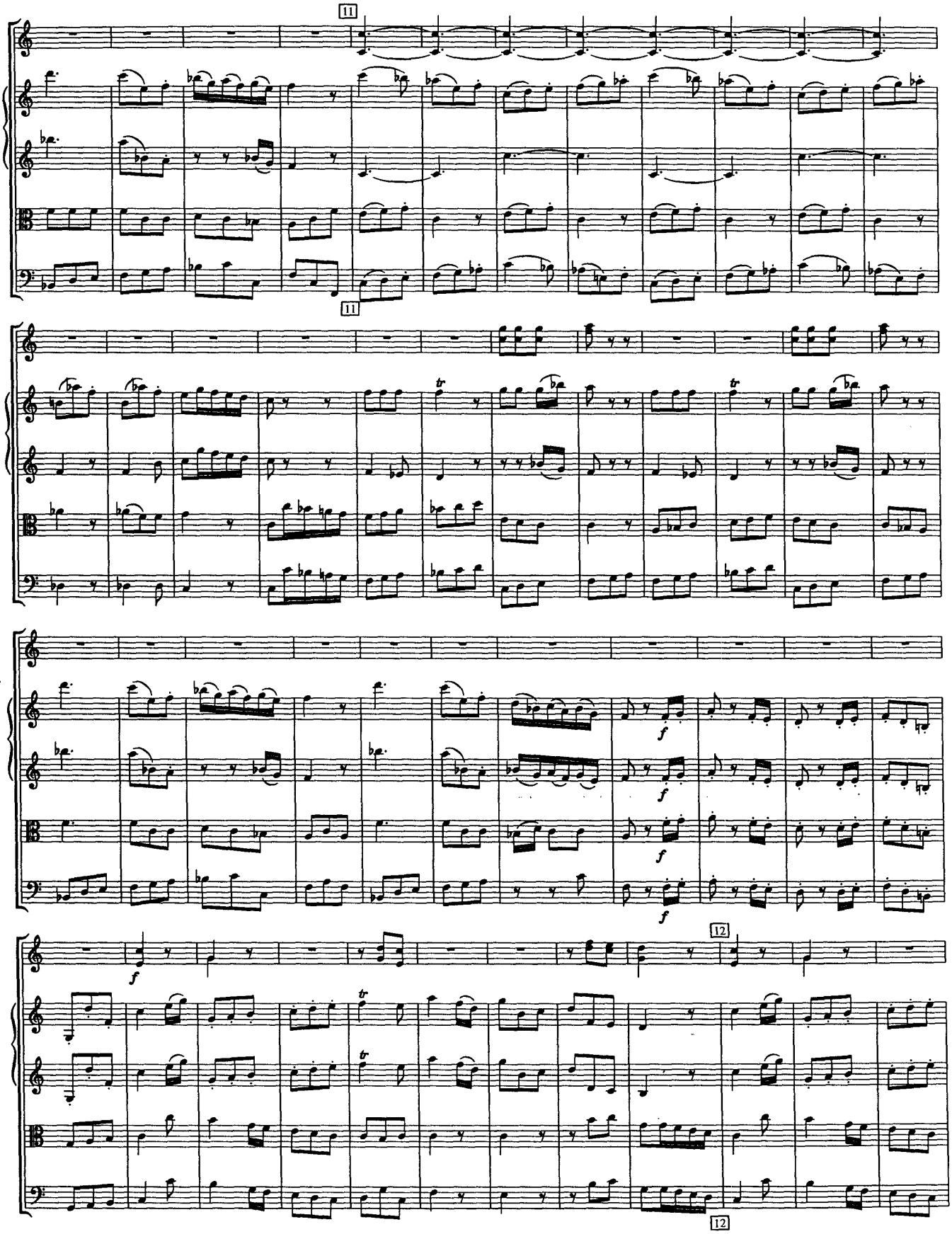
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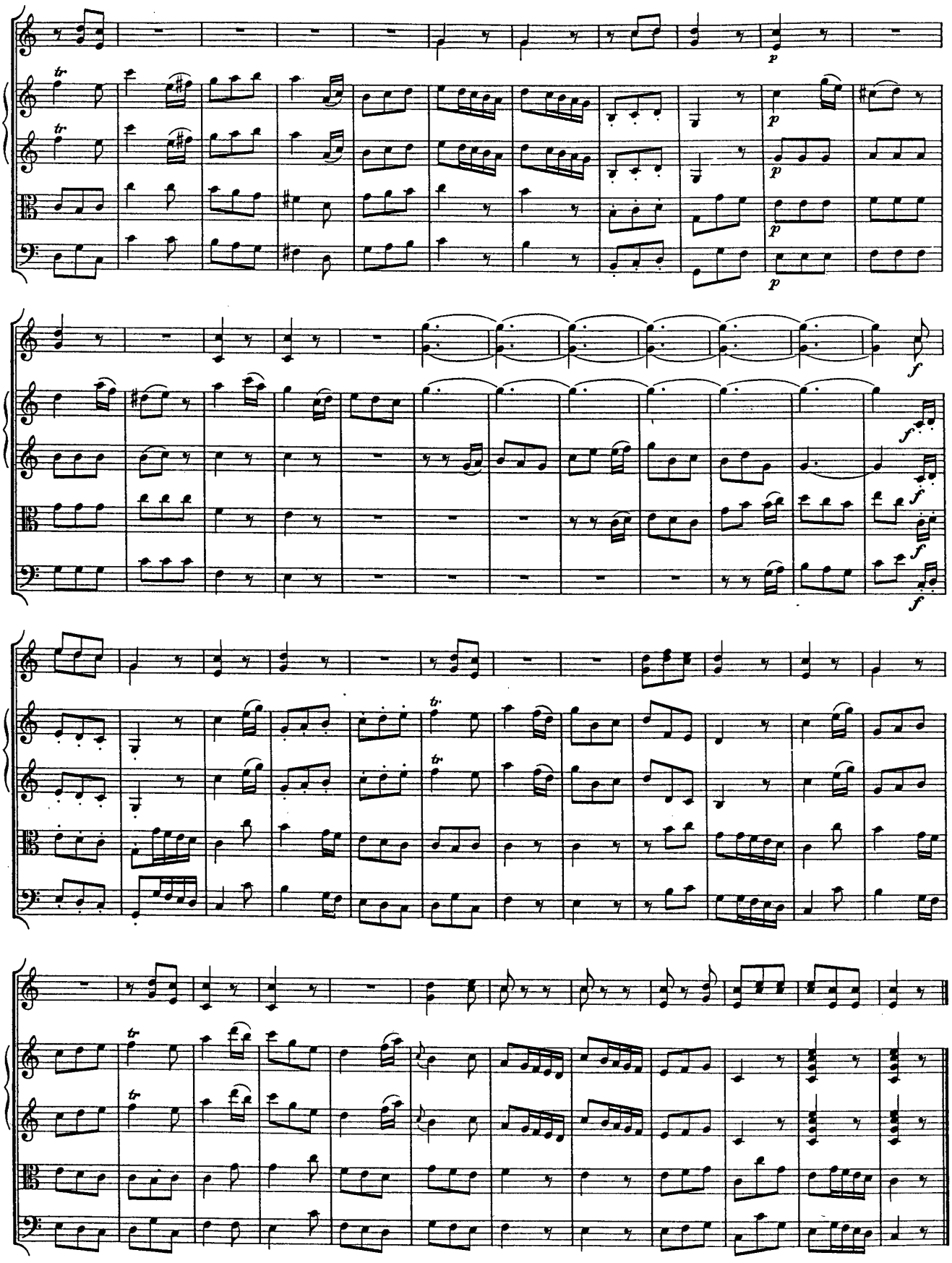

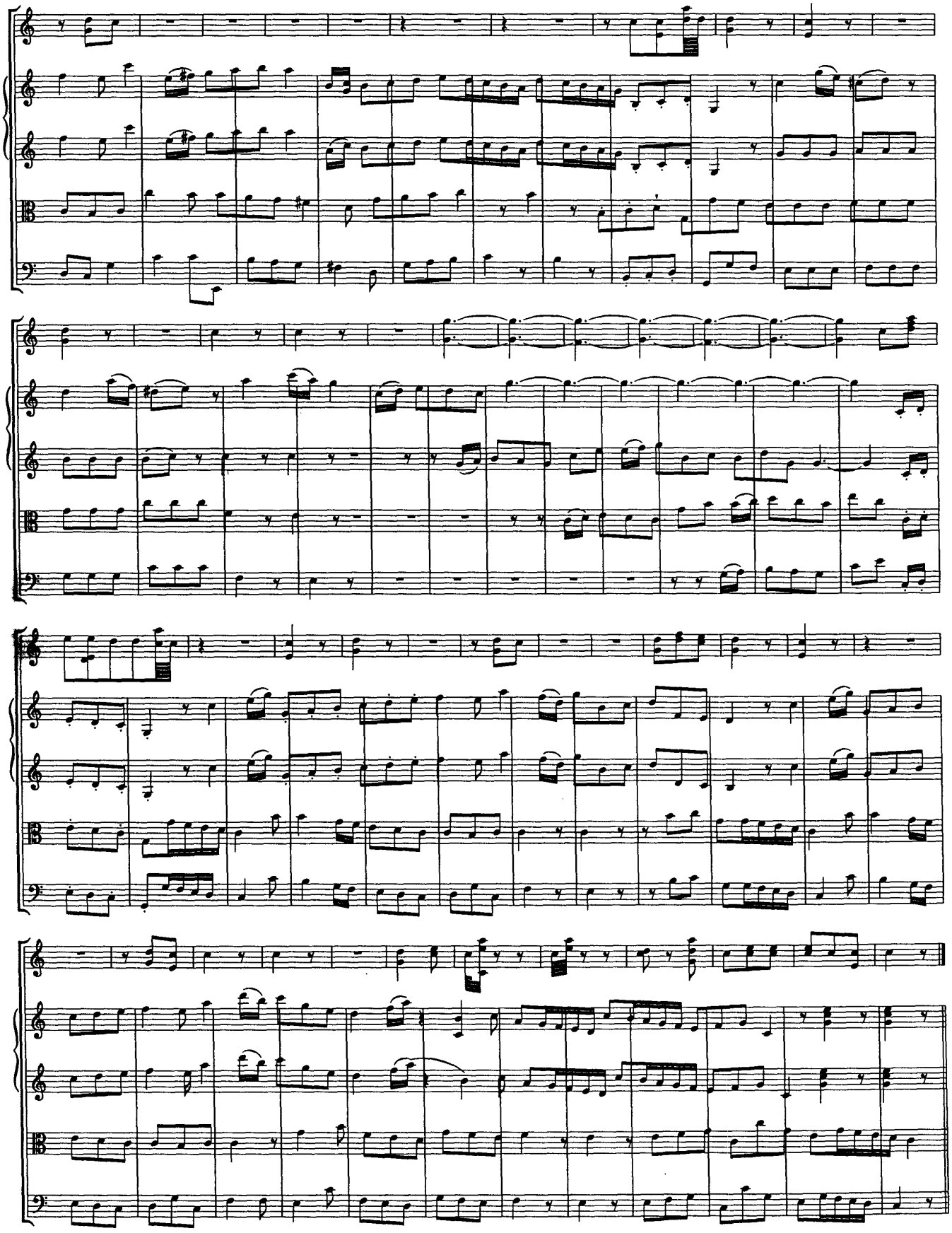

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;
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07 08/13 14/14 15;
14 3 0 2 8 0 -1
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07 08/13 14;
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;
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1 3/6 7/8 10/11 13/17 18/19 21/22 24/27 28/29 31;
06 07/17 18/27 28;
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06 07/17 18/27 28;
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;
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09 10/16 17;
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20/20 21;
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09/08 09/09 10/09 10;
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8/8;
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1 2/5 6/7 9/12 14/17 19/20 22/23 25/26 28;
;
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S 25/S 26/S 27;
4 5/6 8/10 11/12 14/15 19/20 24/25 27/29 31/32 34;
04 05/10 11;
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4/16/16/8/8/8;
S 25/S 26/S 27;
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04 05/30 31/32 33;
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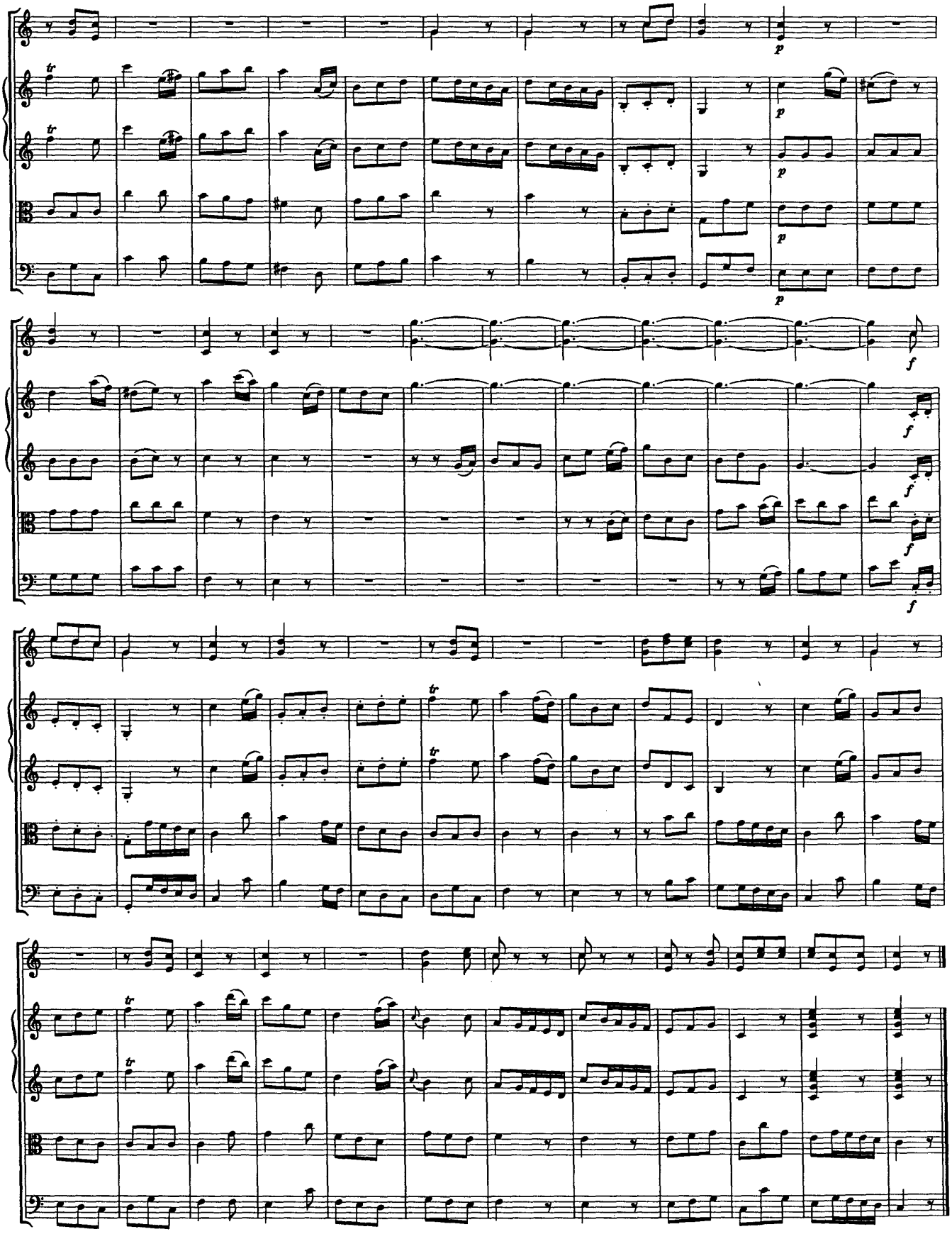
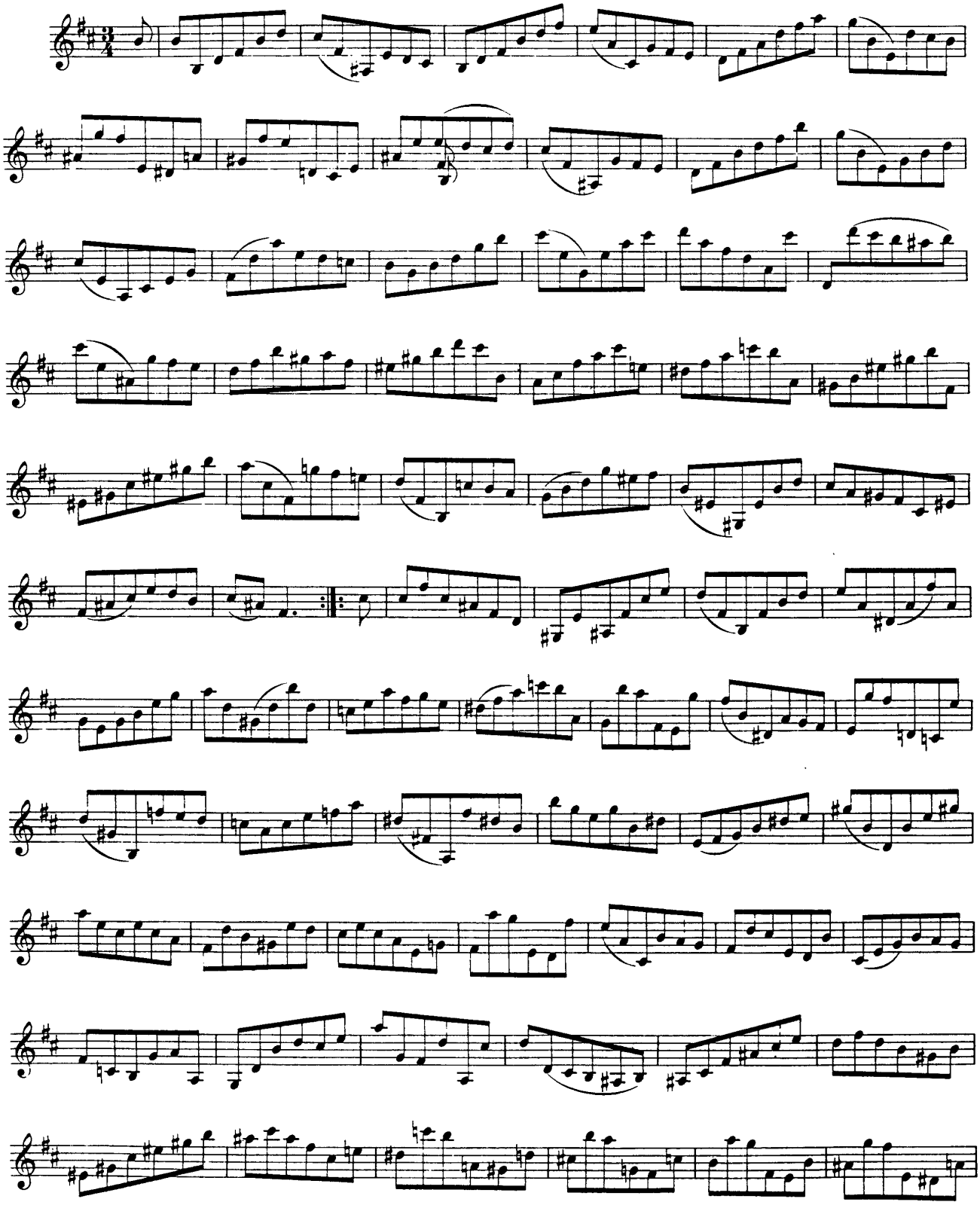
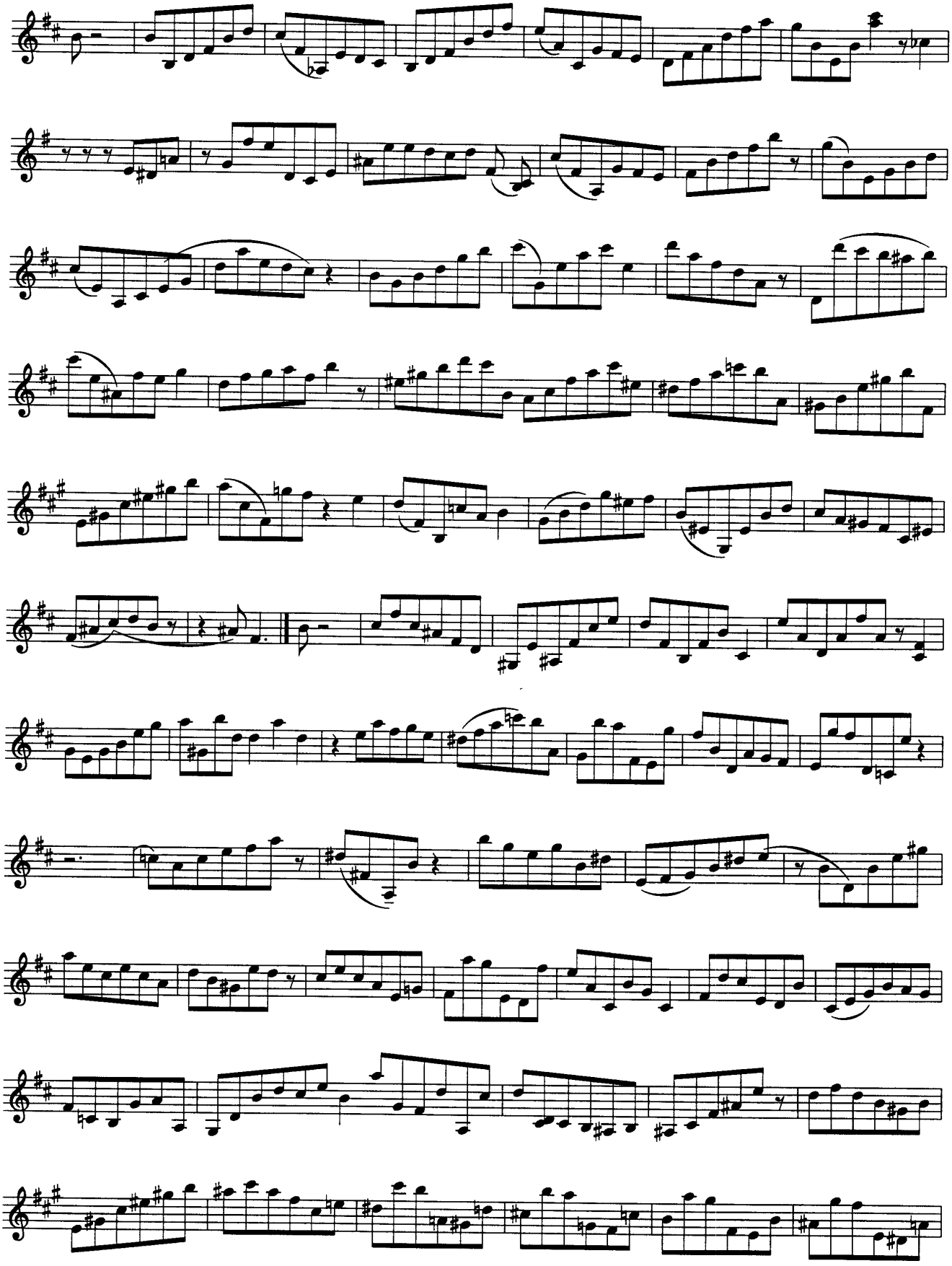


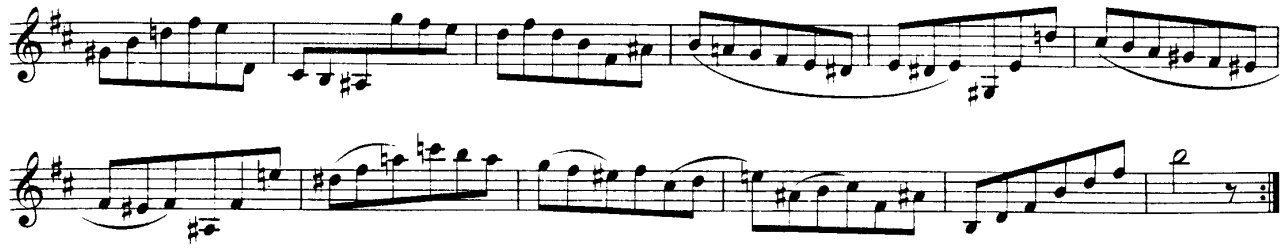
Examples of a single staff instrumental part and a work utilizing systems containing two staves.

The following examples are two page extracts from the Sonatas and Partitas for Unaccompanied Violin (Dover Edition; original engraving - Breitkopf & Härtel) and the Bach flute sonata in E minor (from the Bach Gesellschaft). Each original page is followed by its default reconstruction (using SCORE to reconstruct from the data file produced using the SightReader system). The original pages are reproduced at 90% of the true size. The default staff height and inter-staff spacing were altered in the reconstructed pages in order to fit the examples onto 8.5" x 11" pages. The pages are arranged so that the original and its reconstruction are on facing pages.

Courante.

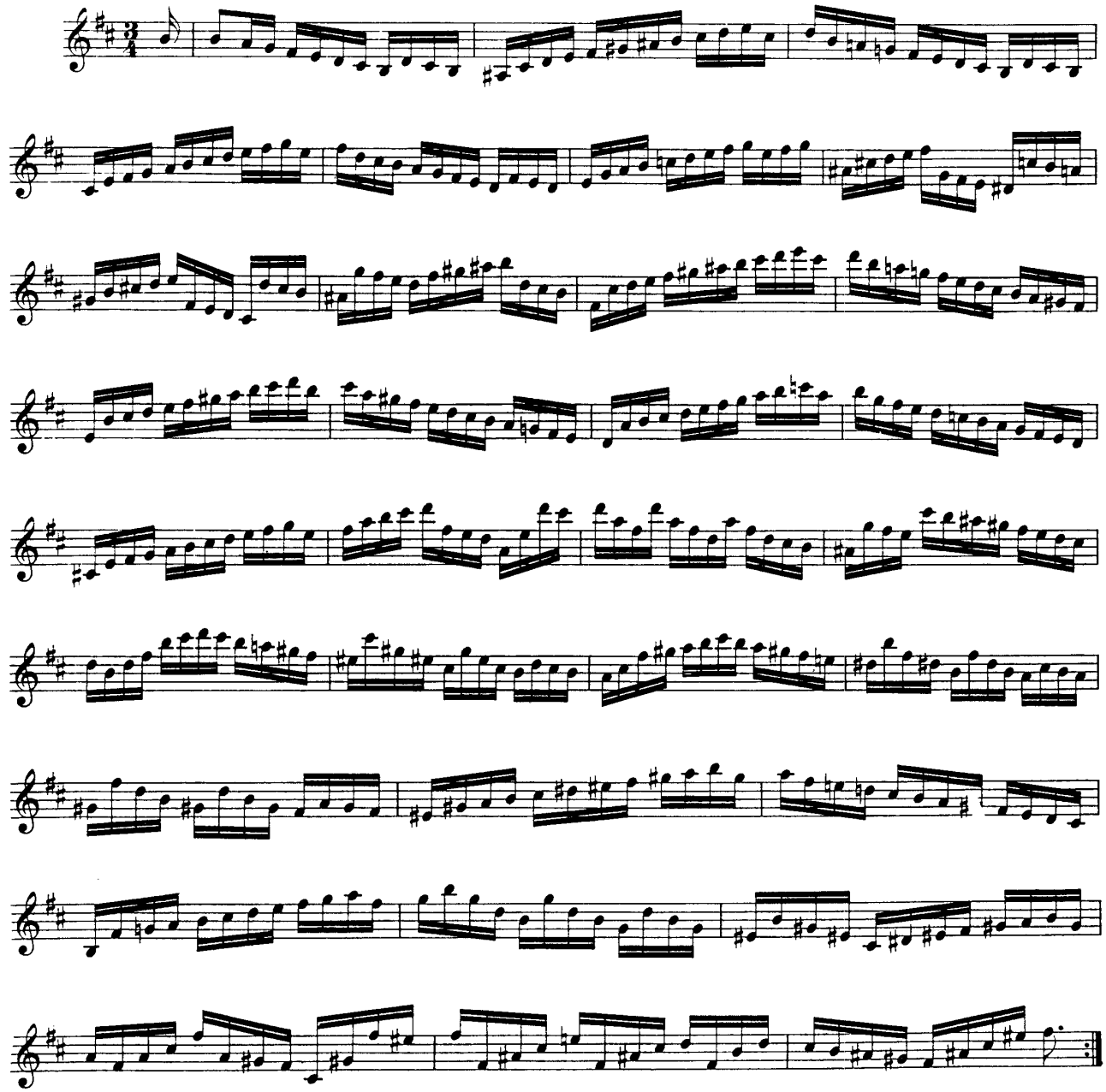


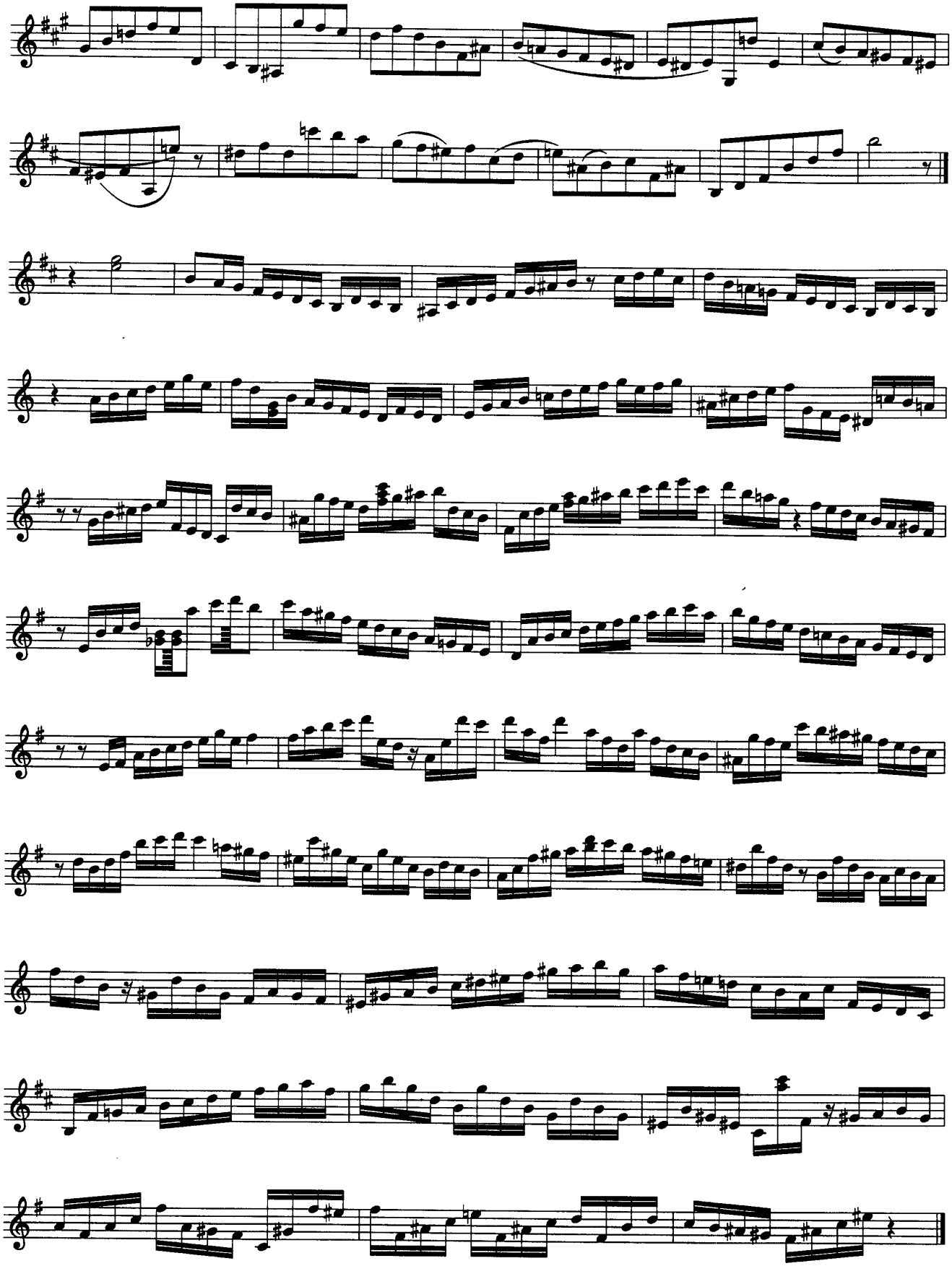




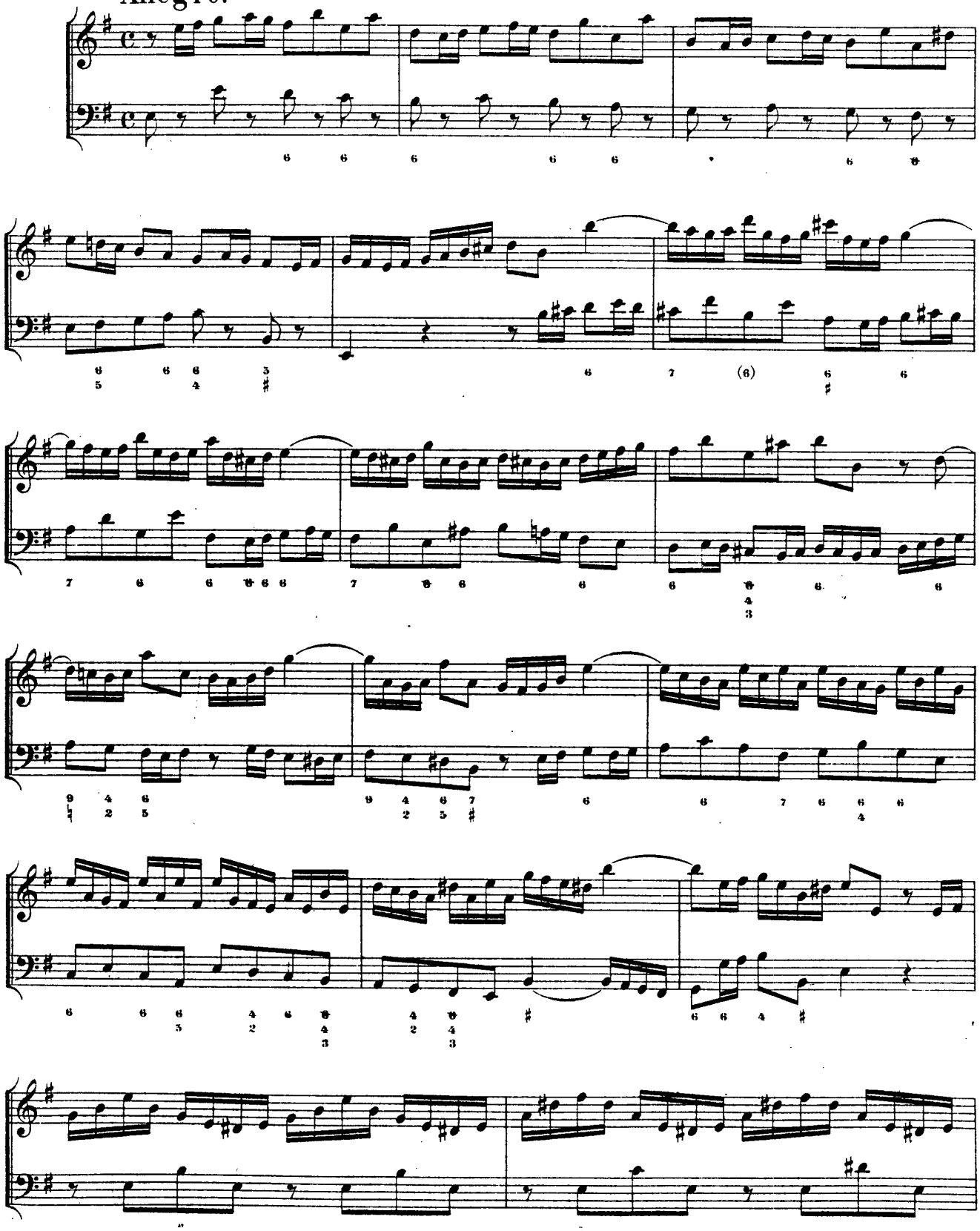
Double.

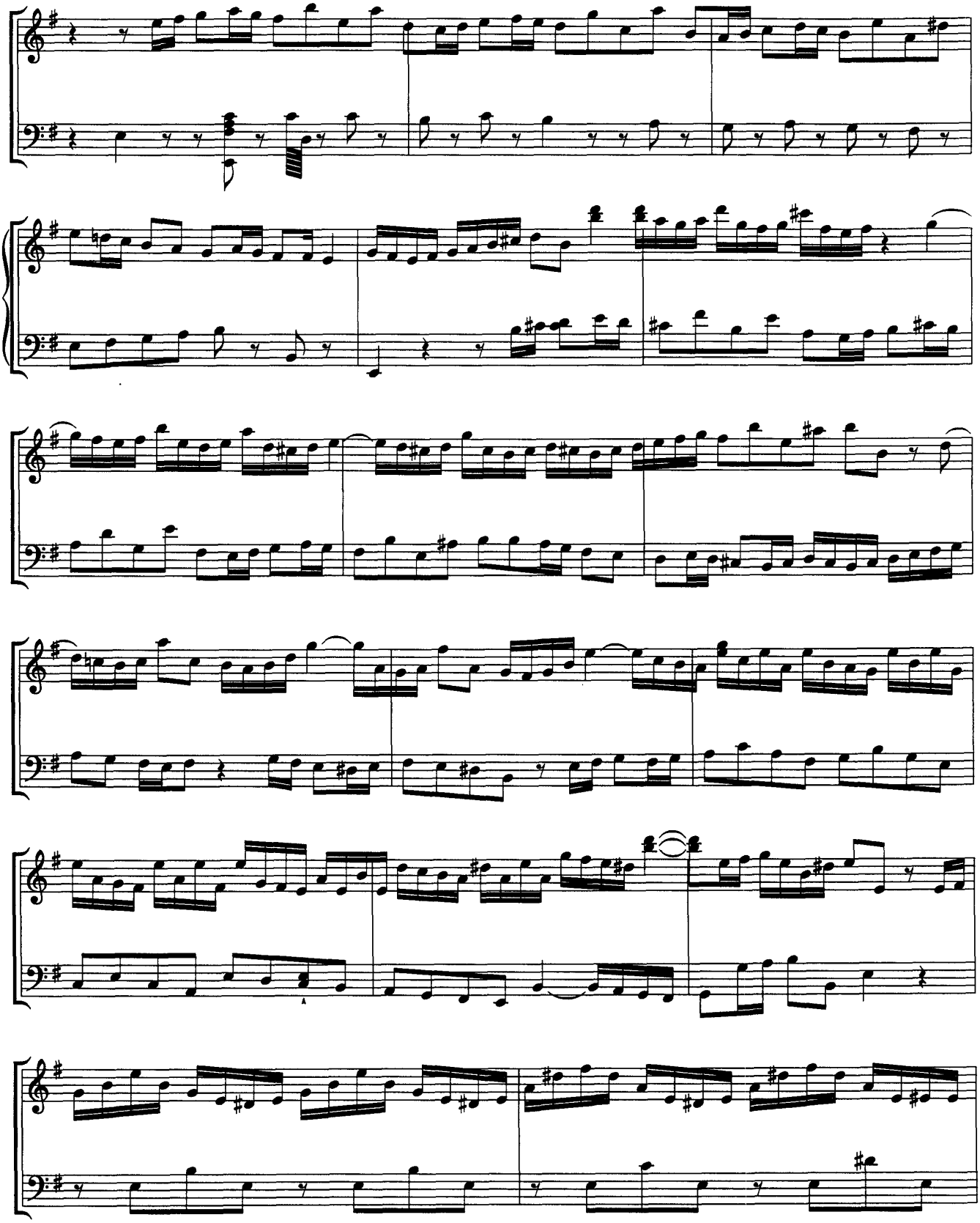
Presto.

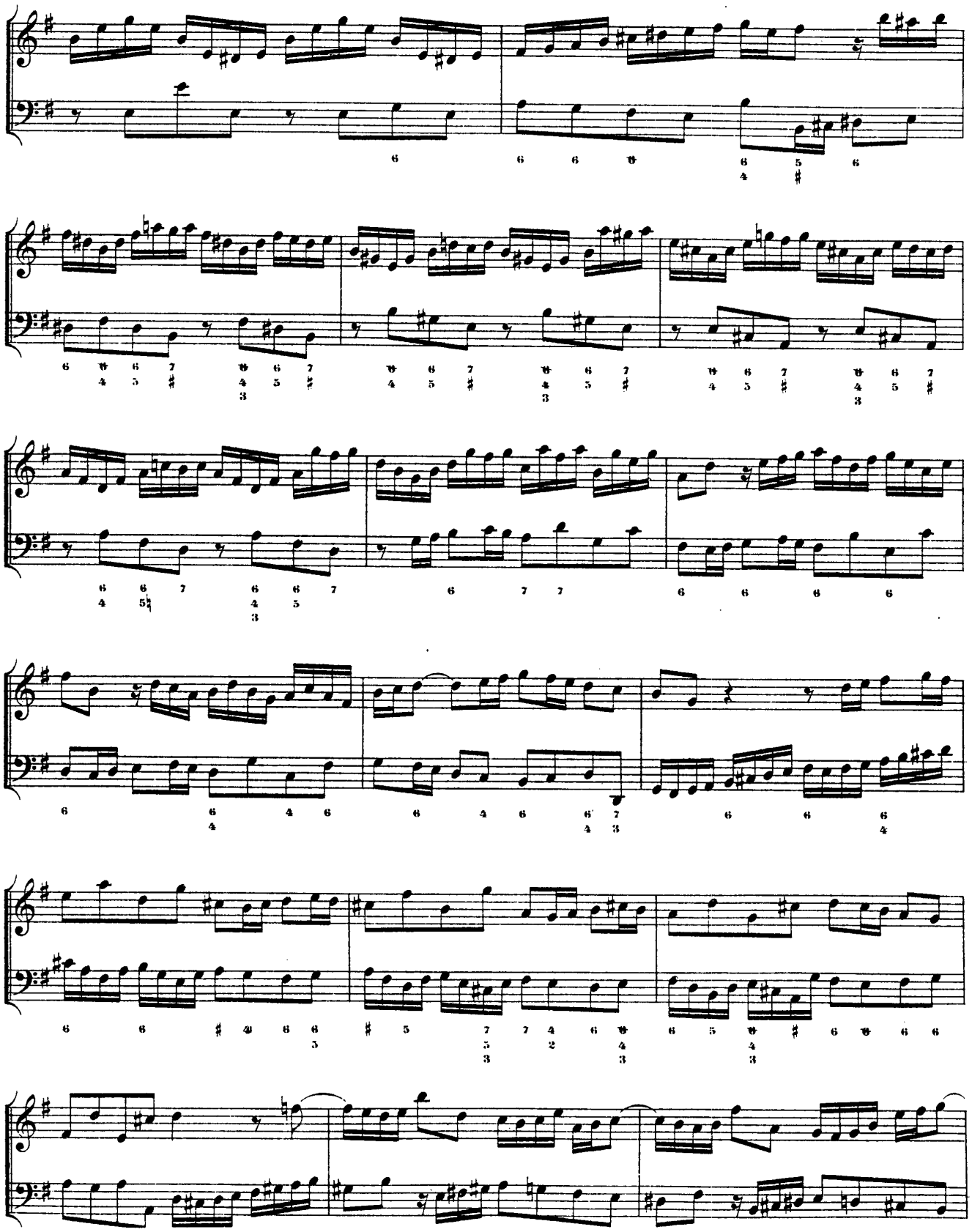


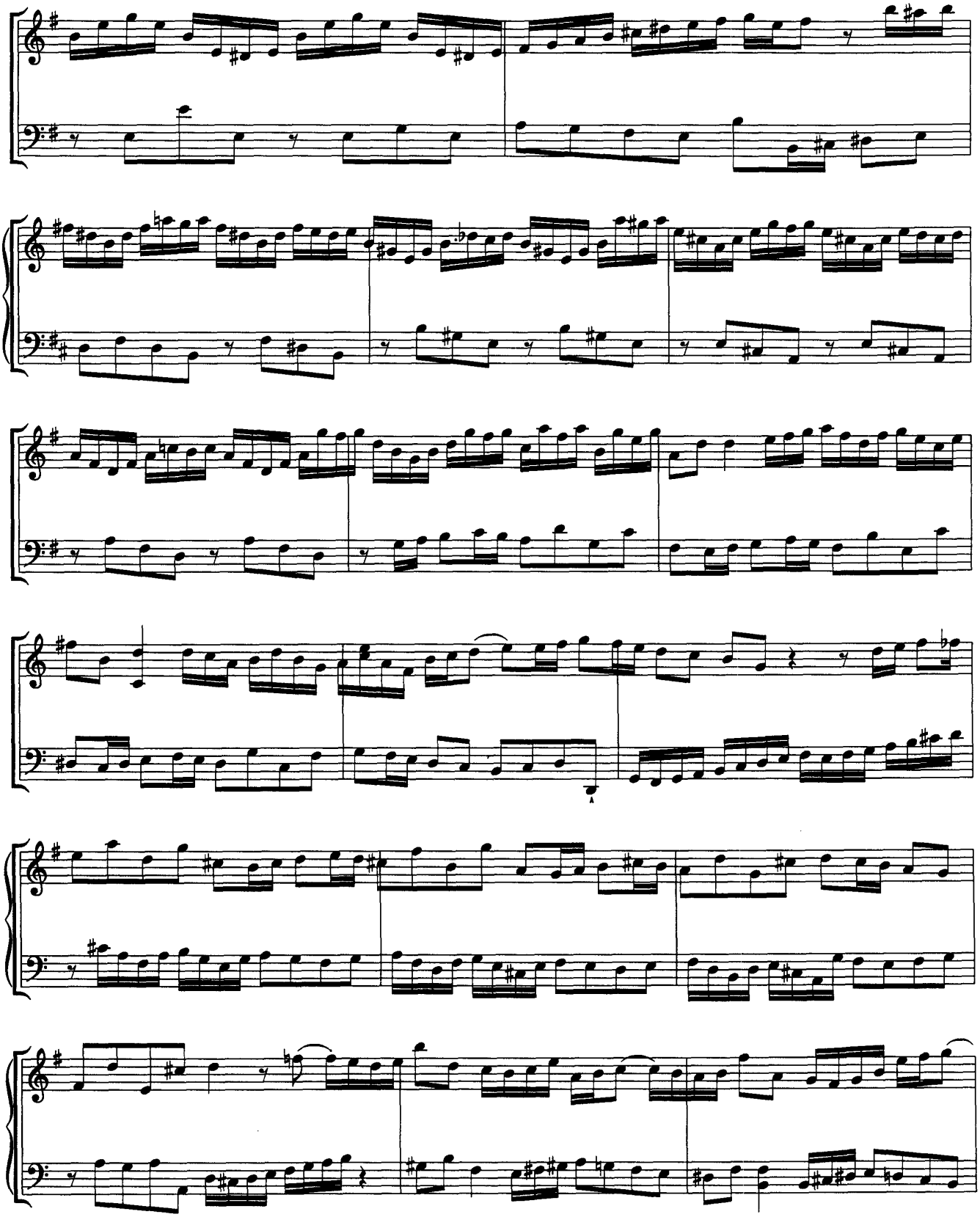


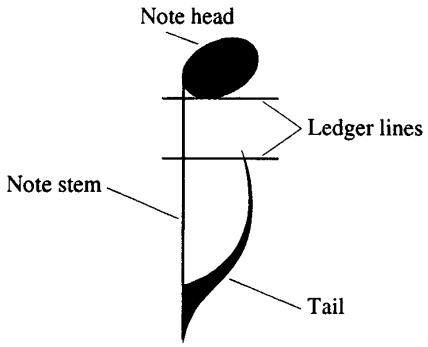
Allegro.



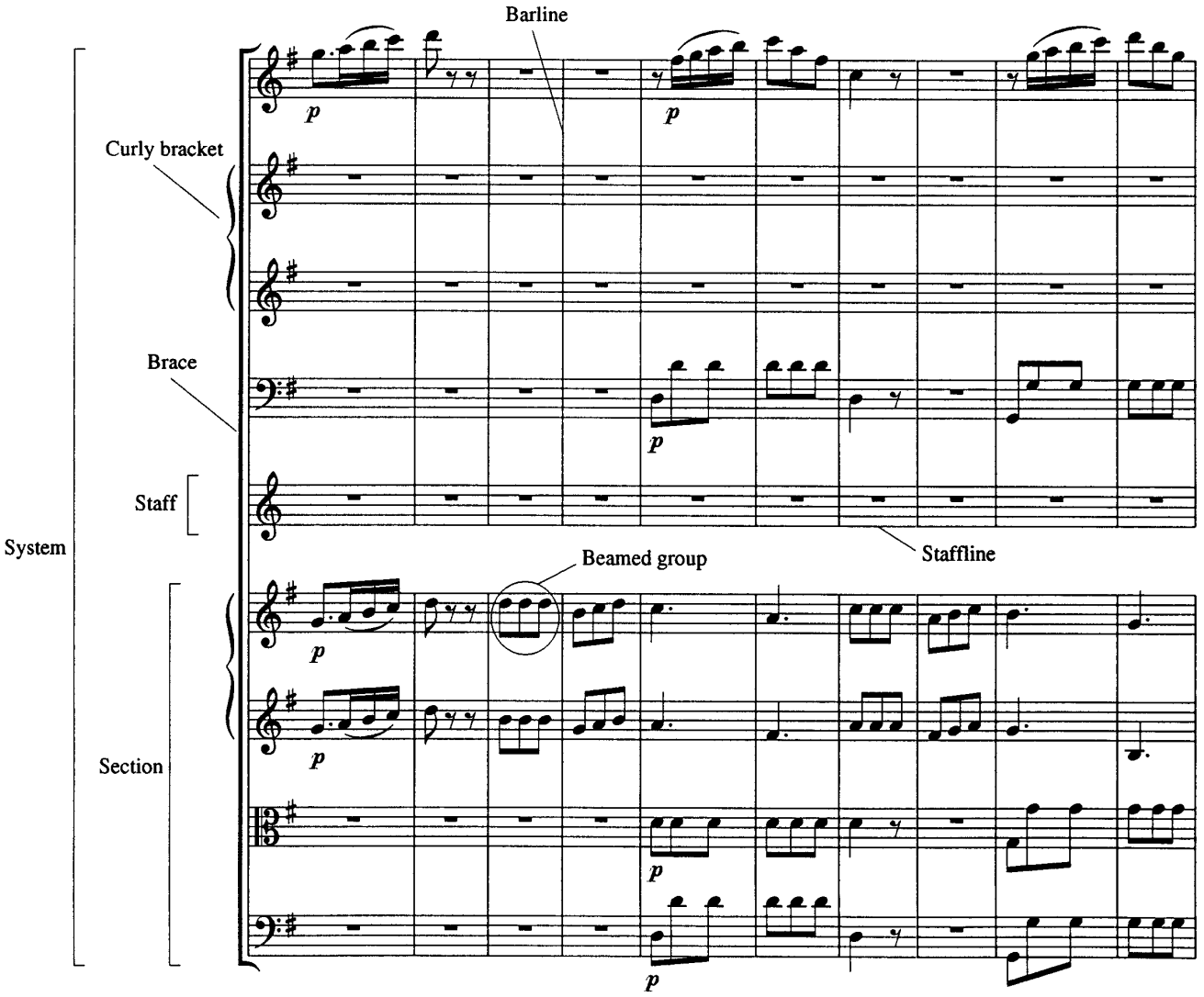








Illustrated Glossary



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