The text in the image is a review of Windows word processors, comparing features and performance of various products. The review is titled "Windows word processors" and includes sections on "Executive summary" and "Inside product comparison." The review notes that each vendor in this round-up has shipped a new version of its product since last year's comparison, and the review aims to distinguish the main players from one another.

The review compares Microsoft Word for Windows 2.0, Lotus Ami Pro 2.0, and WordPerfect 5.1 for Windows, explaining that these programs have similar characteristics but differ in their handling of text and features. The review highlights the ease of use of Word and its ability to support concurrent end-users and footnotes for your reference notes. It also mentions WordPerfect's ability to support a wide variety of printer drivers, which are fully compatible with the DOS version. The review concludes that WordPerfect is the only program to have E-mail integration.

The review also notes the presence of NBI Legacy 2.0, Legacy is a fine product, thanks mostly to its layout features. The major drawback to Legacy is its incapability to support more than one window open at a time. Legacy has taken more of a document publishing approach to word processing, and the frame capabilities give users the option to create multiple layout options. The review concludes that Legacy has a programmatic macro language, and its long list of features is capable and well-implemented.

The review also discusses Delphi's new Word Processor 3.0, which is a new player in the game. The review notes that the Delphi product lacks several features such as an on-screen and online automatic file component. Delphi doesn't offer much as far as reference tools go. It states that the software is the best for those who need basic word processing features. The review concludes that WordStar for Windows does come bundled with WordStar for Windows, which is a macro or keyboard-activated capability. The whole WordStar is a capable product that fills behind a top-heavy field.

The review includes a table titled "The scores," which compares the features and performance of the different word processors, with high scores indicating better performance. The table includes columns for "Report card," "How we test," and "In-depth comparison," and assigns scores ranging from 3.0 to 8.5. The review concludes that WordStar for Windows 1.0 is the highest-scoring product, with a score of 8.5.
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FEBRUARY 10, 1982

REVIEWS / PRODUCT COMPARISON

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The second approach is to split the document into a series of rectangular boxes called frames. A page can be laid out as a series of linked or unlinked, linked, or independent frames. A frame contains characters, words, sentences, and paragraphs and can be used to handle different text styles and formatting. A frame can be an independent frame, a table, or a chart, or a combination of these elements. Frames can be used to organize and display information in a hierarchical manner. Frames can also be used to handle different text styles and formatting. Frames can be used to display information in a hierarchical manner. Frames can also be used to handle different text styles and formatting. Frames can be used to display information in a hierarchical manner. Frames can also be used to handle different text styles and formatting.
Sorting, for example, varies widely in complexity and flexibility from the high-powered sort routine of WordPerfect to the nonexistent sorting capability of Legacy and WordStar for Windows. Equation generators permit the use of complex mathematical symbols that may be several times higher or wider than usual characters. These generators range from the separate equation package of Word for Windows to no equation-writing capability in WordStar for Windows, Describe, and Legacy. Users often need to use a math operation in word processing documents, add a column, calculate a formula in the text, or otherwise manipulate numbers. Some programs have the capability to select or highlight an area of text with numbers and extract it from the document or calculate a formula for Windows, for example, can even calculate numbers in different parts of the document by using bookmarks. Word for Windows, Ami Pro, and WordPerfect perform math functions within tables. Legacy, WordStar, and Describe do not support math functions.

Macros languages have become one of the hot properties of professional word processing. Macros permit users to develop a kind of special-purpose tool for their text and document needs. By writing a sequence of commands and instructions, you can automate practically any function the word processor performs. Originally, macros simply recorded your keystrokes so you could play them back later. Now, the best macro languages include the features of a computer programming language, in addition to the special functions of word processing. WordWorld: the macro language in Word for Windows, may represent the state of the art, but WordPerfect, Ami Pro, Legacy, and Describe all have complete macro languages. Only WordStar has no macro language, although it does have a keystroke-recorder. These languages generally require their own manuals, and with the notable exception of Describe, the programs reviewed here do not include that manual with the package.

**The Price of Power**

This explosion of power and complexity in professional word processing has costs as well as benefits. Many of these new programs have so many complex features that the programs themselves have significant problems keeping all the features working together. Word for Windows and especially WordPerfect for Windows have had various known bugs. (See InfoWorld, December 9, 1991, page 8; December 16, 1991, page 3; and December 23, 1991, page 1.) Users can expect on-line updates or fixes that will address these problems.

Everyone one of these programs needs some kind of documentation to deliver on the promise of their power. If you have a modest 386 machine with a mere 16 megabytes of memory, you will find that these programs drag down your hardware. They really need at least a fast 386, or better yet, a 486, and they require a color VGA board and monitor, 6 to 8 megabytes of memory, a minimum of a 5.25 floppy disk, and of course, a mouse. If you don't have a laser printer, much of the power of these programs will be lost, and the best results come from using PostScript laser printers. If you run these programs on a 286 with a CGA board and monitor, they will produce fine output, but your screen redraws will be painfully slow, the operation of many functions will slow, and the use of your own weighings

to calculate your score

<table>
<thead>
<tr>
<th>REPORT CARD</th>
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<tbody>
<tr>
<td>Windows Professional Word Processors</td>
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<tr>
<td>Price</td>
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<tr>
<td>Performance</td>
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<tr>
<td>Basic editing</td>
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<td>Line spacing</td>
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<td>Font/size/face/stock</td>
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<tr>
<td>Support</td>
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<td>Final score</td>
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</tbody>
</table>

**Use your own weighings**

to calculate your score

**GUIDE TO REPORT CARD SCORES**

INFOWorld reviews only finished, production versions of products, never beta test versions.

Products receive ratings ranging from unacceptable to excellent in various categories. Scores are derived by multiplying the weight (on a scale of 0 to 5) by the respective rating for each product. The weight given to each product is: Excellent = 5, Good = 4, Very Good = 3, Excellent = 2, Unacceptable = 1. Scores are summed, divided by 100, and rounded down to the nearest decimal place to yield the final score out of a maximum score of 10 on this chart. Products rated without the weight of one another differ.

**Excellent**

Products receive excellent ratings in all areas. They are highly recommended by INFOWorld. Good = 0.625 — Meets all essential criteria and includes some special features. Valuable = 0.5 — Meets essential criteria but not all special features.

**Good**

Products receive good ratings in all areas. They are highly recommended by INFOWorld. Excellent = 0.75 — Meets all essential criteria and offers significant advantages. Good = 0.625 — Meets essential criteria and includes some special features.

**Very Good**

Products receive good ratings in all areas. They are highly recommended by INFOWorld. Excellent = 0.75 — Meets all essential criteria and offers significant advantages. Good = 0.625 — Meets essential criteria and includes some special features.

**Excellent**

Products receive excellent ratings in all areas. They are highly recommended by INFOWorld. Excellent = 0.75 — Meets all essential criteria and offers significant advantages. Good = 0.625 — Meets essential criteria and includes some special features.

**Valuable**

Products receive good ratings in all areas. They are highly recommended by INFOWorld. Excellent = 0.75 — Meets all essential criteria and offers significant advantages. Good = 0.625 — Meets essential criteria and includes some special features.

**Unacceptable**

Products receive poor ratings in all areas. They are highly recommended by INFOWorld. Excellent = 0.75 — Meets all essential criteria and offers significant advantages. Good = 0.625 — Meets essential criteria and includes some special features.
Ami Pro has a strong collection of capabilities. Although you can do almost anything in your computer with this program, the price of these new features is complexity and occasional user frustration. Ami Pro offers a wealth of commonly used word processing features in addition to an endless series of special features. Ami Pro also provides an inexhaustible selection of views, preferences, and customizable options.

DeServe, originally introduced as a DOS/2 word processing program, now appears in Ami Pro and is compatible with both Windows 3.0 and OS/2. Version 2.0 starts DeServe's confusion. It offers a different look and feel from Ami Pro. It is not a word processor, and it is not closely integrated with Ami Pro. Rather, it competes more successfully against Legacy and WordPerfect for Windows.

DeServe's search-and-replace capabilities include search pattern matching, finding special characters and finding and replacing formatting. You can opt to have DeServe maintain capitalization when replacing. DeServe's tab options include center, left, right, decimal format with dot, dash, and underline. You can define leading character. You can append a selection to material already in the clipboard. Most programs overwrite the clipboard whether you copy or cut, and you can cut and paste columns. But DeServe does not support prompt or user-prompted hypenation. It splits the window horizontally to vertically to edit the same or different document; it can link information with Database Exchange.

In our ease-of-use tests, we found awkward mouse support in that the mouse must be directly at your editing point to reposition the cursor. Score: Good.

DeServe allows multiple columns of differing widths and different gutter sizes, and you can have column-balanced views. You can edit a variety of fonts that display their results live, and you can edit your text immediately. You can create tables, insert notes, insert images, and use a variety of fonts. DeServe also provides a variety of views, including full-screen, side-by-side, and split-screen views. You can also undo and redo changes. DeServe also offers a variety of layout options, including headers and footers, columns, and tables.

DeServe offers a comprehensive set of editing tools, including find and replace, search and replace, and a variety of formatting options. It also offers a variety of output options, including print and save as PDF. DeServe is compatible with Windows and can be used with Microsoft Word, WordPerfect, and other word processing programs.

DeServe offers a comprehensive set of features and tools, making it a powerful word processing program. It is compatible with Windows and can be used with other word processing programs. Its ease of use and flexibility make it a good choice for users looking for a powerful word processing program.
Microsoft Word for Windows Version 2.0

WordPerfect for Windows Version 5.1

WordStar for Windows Version 1.0

Summary

Each company in this comparison has shipped a new version of its Windows-based processor since our last word processing roundup. A few of the products (DeScribe, WordPerfect 5.1 for Windows, and WordStar for Windows), are now to the Windows market. Ami Pro and Word for Windows have made a lot of profits since their former versions, especially in the breadth of features and ease-of-use enhancements.

Basic Editing

Word for Windows is the top performer in basic editing. Not only is its features list nearly complete, but its features are also easy to use. Word introduces the new drag-and-drop capability for moving text. Ami Pro and WordPerfect 5.1 for Windows are also quite impressive. There are features that these programs lack, and they, too, are quite user-friendly. We found Legacy and WordStar for Windows to be nearly equal, although both suffer from certain unexplained feature omissions. DeScribe, while it has a fine features list, is difficult to use because of the odd way it handles the mouse.

Proofing Tools

Word for Windows was once again the winner of this category. Not only does it contain the basics, but we found the suggestions given by the spell checker to be the most accurate. Legacy and WordPerfect 5.1 for Windows are fine performers. Although WordPerfect lacks a grammar checker, the spell checker will automatically check all text. WordStar for Windows lacks these spelling checker blocks. Legacy has an integrated grammar checker, but the spelling checker didn’t perform as well as suggested in our tests for spelling corrections. WordPerfect 5.1 for Windows has a Correct Grammar bundle with the application, but we found that the spell checker wouldn’t detect the misspelled word.

Layout

All of these word processors do a fine job with layout. Ami Pro uses frames, which allow you numerous layout options, and Ami also offers extensive capabilities for manipulating graphics. Word for Windows also uses frames, but it lacks the capability for story lines you’ll find in Ami Pro. Word for Windows also offers formulas, drawing, table, and graph editors. Legacy, DeScribe, and WordStar follow closely behind Ami Pro and Word. These three programs can use frames to manipulate text and layout. Like the others, these three processors offer a wide range of graphics capabilities. None of these programs has an equation editor, but Legacy will support simple math. WordPerfect 5.1 for Windows has a frame editor that can be used to manipulate text and layout.
Word processors

bines documents, center and full justification, and the option to hyphenate text automatically. Additional features include the capabilities to perform sophisticated searches that include wild cards or embedded codes; to define a block of text and copy or move it to another location within the document by dragging it with a mouse; to link documents dynamically; to have underlined tab leaders; to edit and re-size documents, and to insert the current time and/or date in a document. We also award bonus points to programs that support Dynamic Link Exchange (DDE) and Object Linking and Embedding (OLE). A win/case-of-use project requires basic editing of our sample document, including inserting and deleting phrases and entire sections of text. In addition, when building our sample document, we note ease-of-use features such as quick keys for moving or deleting text by word or paragraph, ease of navigation through the document, ease of inserting page breaks, and adding a "plain text" equivalent of text that is already bold or italicized.

Proving a word processor's error checking and correction errors is a challenge for a spelling checker, we wanted to provide a tool that would allow for the addition of words to a user dictionary, to maintain capitalization and hyphens, and to back up, if an incorrect option is accidentally selected: to have the option of replacing a word globally, and to check correctness of headings, subheadings, footnotes, and other framed text automatically. We required programs to have access to a thesaurus when editing documents, and we also require a grammar checker. Bonus features include checking spelling, corrections that you enter, allowing users to double words or define the meaning of words, and checking spelling in real time, listing parts of speech or definitions when providing synonyms in the thesaurus, and global replace and undo. We also awarded bonus points for support of multiple language dictionaries.

In our ease-of-use test, we proof two short documents and note the usefulness of support features. The first suggestion is the "best guess" how much of the context of the error you can view and the time it takes to receive suggestions. In addition, we note if words we have added to the user dictionary are included in the spelling checker's list of suggestions.

For more details, see HOW WE TEST, page 92

DeScribe's floating toolboxes make a variety of capabilities available for your editing needs.

DeScribe's merge has variables, comparison operators, conditional inclusion of text, and userdefined filters. This feature is especially useful in forms and layouts. In general, DeScribe's merge is easier to use than other products. Score: Very Good.

Mail Merge

Mail Merge provides the basic functions for processing data files prepared within the program or imported from ASCII delimited files. Although you can define delimiter characters, you can use any of the common database or spreadsheet files, such as Lotus 1-2-3, dBASE, Paradox, ASCII, and DIF. A superlative feature is the three-level sort that automatically recognizes various delimiters. The customization of the merge is not as simple as it is in Word for Windows. Score: Good.

Style Sheets

Style sheets include all the information needed to format paragraphs including fonts, layout, indentation, line length, and other visual cues. You can use style sheets to organize and save the styles with the document. You can also modify styles and save them with the document, but not become permanently attached to the style sheet. You can permanently modify a style, create styles from an existing document, or create a new style. Ami Pro applies styles to paragraphs and handles table layout requirements for columns and rows. Ami Pro's styles are comprehensive and self-explanatory. Score: Excellent.

POM: Printer Support

DeScribe uses standard Windows printer drivers, and the program doesn't ship with any font-scaling package. You can print in reverse order and without pictures or other special elements in draft mode. You cannot do portrait and landscape printing in the same document, and the printer properties can print a range but not selected pages from a document. DeScribe will print with crop marks for standard page sizes. Score: Good.

Legacy supports all Windows printer drivers. You can print landscape and portrait orientation on different pages in the same document, and you can have the document printed in reverse order, collated, and without pictures or other graphic elements. Legacy's typographic controls include tracking and pair kerning, both automatically and manually, to one thousandth of an in. Score: Very Good.

Legacy

Legacy's mail merge provides the basics for processing data files prepared within the program or imported from ASCII delimited files. Although you can define delimiter characters, you can use any of the common database or spreadsheet files, such as Lotus 1-2-3, dBASE, Paradox, ASCII, and DIF. A superlative feature is the three-level sort that automatically recognizes various delimiters. The customization of the merge is not as simple as it is in Word for Windows. Score: Satisfactory.

Legacy's styles, stored separately by name, include all the information needed to format paragraphs and characters. You can modify styles permanently or temporarily. You can also create styles by example. Legacy also allows you to save properties (specific attributes associated with frames) in style sheets, which is unique in word processing. Style information can stay with an individual document or become a separate, stored style sheet, available for use with another document. Style management is somewhat less flexible than with Ami Pro and Word for Windows, although we found Legacy's styles relatively easy to use. Score: Very Good.
Microsoft Word for Windows supports graphics import and tables and can perform math functions.

WordPerfect's Reveal Codes capability allows for complex manipulation of formatting.

WordStar's frame capabilities allow you to place a graphic and have text flow around the graphic.

Summary (Continued)

The weakest layout capabilities. We found that WordPerfect lacks some ease-of-use features necessary to perform layout tasks, such as the capability to see your entire page with headers and footers, and we also found a reproducible UAE in one of our layout tables.

WordPerfect's X.11 for Windows' mail merge offers all the standard controls and more powerful programming commands for complex form letter and list processing tasks. The program handles labels automatically, but does not accept Lotus or database program files. It will convert ASCII-Zip or text files constructed with practically any delimiter, but we found that it cannot handle files that include a soft return. The WordPerfect sort routine remains the best in the business, and it's performance is flawless in our tests. Producing a template for your labels was a breeze.

WordPerfect's merge will not automatically skip bad records. Rather, an alert appears and the print job is interrupted. You can import ASCII-deflected, comma-delimited, dBase, and WordStar mail list files. The program has complete flexibility in defining field delimiters. WordStar does not support conditions of any kind, so you can't select a subset from an external list. There is a bug in the export feature. You cannot export an existing file, which makes editing an ASCII data file cumbersome, because you have to retype the file in DOS or retype the file under a different name. Score: Unsatisfactory.

Mail Merge

Word for Windows, WordPerfect 5.1, and Ami Pro for Windows have strong mail merge capabilities. You can create form letter templates and 3-up labels, and all performed well in our tests. Ami Pro's merge does, however, lack user-defined variables Describes Legacy and WordStar compete for similar kinds of mail merge and offer basic sets of features. WordStar's merge will not automatically skip bad records. WordPerfect's merge lacks the capability to see your entire page with headers and footers, and we also found a reproducible UAE in one of our layout tables.

WordStar supports all Windows printer drivers and it is also bundled with Bitstream's Facelift. Unfortunately, Facelift will not install only on the E Drive, and if you don't have enough space there, you have to make room for it. WordStar supports color printers through Windows, as well as black-and-white printing within the standard document dialog box. Use the color and black-and-white printing. Score: Good.

Font/Printer Support

All products offer fine printer support through Windows. Ami Pro is bundled with ATMI and WordStar is bundled with PicoLift. WordPerfect ships with a very impressive list of its own printer drivers.

Set the Widths and Heights of your Images to be Compliant with the Document's Layout Specifications.
HOW WE TEST

Word processors

to skip a bad record without disturbing
the remainder of the file, and to permit
the user to copy data fields in a dif-
ferent order than they occur in the file.
Bios features include a simple database
management system that cannot
search for records, auto-prompted
noting, and provision of conditions
and statements to control merging. We
also award bonus points for templates
that allow you to print labels on a sheet
with three rows by three columns (3-up
label templates), a template or other automatic
way of printing labels directly on a
standard envelope, the capability
to capture an address from an envelope
for insertion into a letter or vice versa,
and finally, the capability to merge
directly from data stored in popular
database

The speed score is based on the performance in our benchmark files.

Ami Pro supports most DOS word
processing file formats — various ASCII
formats, WordPerfect character formats,
DCA/RFT, Microsoft RTF, and many
others, including Word for Windows, but
not Windows 95. Ami Pro 2.0 supports
these formats. Ami and Lotus support
multiple records on a single page, omit-
ing black lines when fields have no data,
gathering records by a common ID, and
formatting output fields with font
attributes such as size or bold.

Ami Pro features are similar to those
found in formatting a document. We require
products to support columns, to specify
margins (or gutters) between the columns,
and to break columns for headings. If a
user must create a separate table or
object for columns, we require the frames
to accommodate all text and to have the
capability to merge text frames. We also
require products to support definition of
inside and outside margins, a
WYSIWYG preview, graphics preview,
scaling and cropping of imported images,
a table editor, and the capability to draw
at least two line types.

We award bonus points to products
that support WYSIWYG editing, shaded
backgrounds, measurement options (for
example, inches and pixels), widows
and orphans control, vertical justification,
and anchoring elements. In addition, bonus
features include an equation editor, simple
math capabilities, and the capability
to perform free-form drawing, create
circular shapes, and perform simple graph-
ics manipulations, such as rotation.

Our ease-of-use score provides com-
plexity ratings of simple and complex
documents from errors, and we pay
special attention to the implementation of
the layout features.

For style sheets, we require that a
product store information in a format
that can be named or numbered, a collection
of which must be accessible from a frame
or another file, and can be copied into the
document. We also require the capability
to record styles, such as highlighting,
choose to define screen.

See HOW WE TEST, page 94

see AMI PRO, page 94

review AMI PRO, page 94

See DESCRIBE, page 94

See AMI PRO, page 94

review AMI PRO, page 94

see LEGACY, page 94

see LEGACY, page 94

DeScribe has no built-in font setting
and does not include any built-in fonts.
This program does not allow users to
access the font settings, but instead
allows users to select font sizes,
styles, and effects.

DeScribe supports a complete macro
programming language. The program
contains 30 precompiled macros, or you
can supply your own. The macros are
complex files with all the power of a full
programming language. You can also
assign macros to keys and menus. De-
scribe provides the macro manual in the
shipping package, which is a major
advantage over other packages.

DeScribe's networking is supposed to
allow you to open a second copy of a file
as read-only, or open and save changes
to a different name. However, we found
a bug that allows users to open the
same file in read/write mode — the
last version of the file that is saved is the
one that prevails. DeScribe will be shipping
a fix for this bug in about two weeks.

DeScribe was especially slow in
its rendering of changes, because we had to
accomplish that manually via cut and
paste. DeScribe was unable to print the
EPS file in our complete document, so we
could not evaluate us times for the highly
formatted text. Score: Satisfactory.

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EPS file in our complete document, so we
could not evaluate us times for the highly
formatted text. Score: Satisfactory.
WordPerfect supports various forms of ASCII transfer, all WordPerfect character-based formats (and WordPro for Windows, because the file formats are compatible), all versions of Word for Windows, Macintosh MS Word, Microsoft RTF, WordStar through Version 3.5, dBase III plus and IV, Excel, Lotus 1-2-3, 2-3-4, Macintosh Word, StarWrite, WordPerfect, and files with graphics conversions. WordPerfect also supports Autocad Lotus 1-2-3, CGM, among others. In one test we found that the conversion of a high resolution file of 3.5 MB resulted in a slightly inaccurate formatting. So: Excellent.

WordPerfect 5.1 for Windows allows you to open a second version of an open file as read only, and you can edit the file and save it under a different name if you choose. So: Good.

WordPerfect was a little sluggish in our speed tests. However, its print time for our complex document on a PostScript printer was particularly quick, probably because of WordPerfect's printer driver. Its speed in generating a table of contents was on the slow side. So: Good.

WordPerfect has a powerful macro facility that permits programming constructs that are equivalent to WordBasic or WordPerfect's macro language. The program has a converter that converts WordPerfect's 1.0 macro to WordPerfect's 2.0 DOS macro. WordPerfect macros in WordPerfect's 2.0 DOS format, although WordPerfect recommends recreating your macros in WordPerfect's 2.0 because the Windows macros use different keystrokes than the DOS version. You can record actions and keystrokes to create exact command sequences. So: Excellent.

WordPerfect for Windows is an outstanding feature, but it includes only numbering lines. Another feature option is to use symbols instead of numbers, and you can vary the numbering system. You cannot collapse or expand automatically numbered or indented outlines, although you can number lines. WordPerfect supports index and table-of-contents generation both for a single or multiple documents and 10 displays of figures, tables, text boxes, and other elements. An elaborate cross-referencing system and an automatic table of contents allow users to see and easily modify. So: Very Good.

WordStar for Windows has a reasonable number of import and export text formats. While the program handles Word Pro Versions 4.x and Microsoft Word, WordPerfect 5.1, and WordStar versions 6.0 and 2.0. It lacks a Word for Windows and a DCA / RTF converter. WordStar for Windows imports tables from Lotus and Excel automatically if you create your table in your spreadsheet. The program will import EPS, DRW, HPGL, PGF, WMF, PCX, BMP, and TIF files, but it doesn't handle Lotus 1-2-3 PICT format graphics. The RTF converter has a bug in it that prevents the conversion. So: Satisfactory.

WordStar is the only product that will not allow you to edit an already-open file and save your changes to a different file name. We found a bug in Describes' networking that allows two users to have a file open simultaneously. (WordStar will be shipping a bug shortly.) Word for Windows and WordStar have user ID sanctions. WordStar is a relatively new product that offers E-mail integration.

WordStar for Windows has no programmatic macro facility and no keystroke capture facility. So: Acceptable.

WordPerfect for Windows has a reasonably fast execution speed, but it lacks a full outlining capability. Describes'weakness is, to nonexistent, reference tools.

Ami Pro, Word for Windows, and WordPerfect 5.1 for Windows offer the most complete import and export capabilities. All support most DOS word processors and DCA/RTF, and in addition to a host of graphics formats. Describes' weaknesses are in supporting an import/export. WordStar lacks support for Lotus graphics, and there is a bug in the RTF converter that prevents a successful conversion.

Ami Pro, Word for Windows, and WordPerfect 5.1 for Windows were the quickest products, although all are a little sluggish on-screen, and WordStar was the slowest. (WordStar will be shipping a bug shortly.) Word for Windows and WordPerfect have user ID sanctions. WordStar is a relatively new product that offers E-mail integration.
Windows professional word processors

We award bonus points to products that support WYSIWYG editing.

For font and printer support we require that products support scalable fonts and reverse (or back to front) printing. Bonus items include support for different paper sizes such as letter and legal, the capability to print several thumbnails on one page, scaling, font effects such as shadowing and outline, and font shading. Additional type styles such as outlined and shadowed, typographic capabilities such as a headline and table font, and the inclusion of a font-scaling package such as AIT. We award bonuses for products shipping with their own, better printer drivers, such as WordPerfect.

For reference, we require products to support an outlining utility that will automatically number entries; they must also be able to reorganize categories and to permit at least one outline level. In addition, we examine a product's utilities (including those that are not sold as separate packages), and examine a product's automatic line-breaking capabilities. Finally, we look at a product's automatic margin and spelling capabilities.

If the product is a word processor, we look at its ability to create a WordPerfect-compatible file.

Legacy's documentation contains a getting-started booklet, a short index, and a solid reference manual. The manual provides clear explanations and examples, and a fine index. On-line help and context help with indexes plus an on-line index. Legacy's documentation is up-to-date and helpful (but not on-demand). Score: Excellent.

Describe's documentation includes a large user manual, a substantial macro manual, a quick-start booklet, a LAN administrator's guide, a 3.5 inch DOS documentation reference manual, and a reference card. The documentation has clear examples and explanations, and a fine index. On-line help and context help with indexes plus an on-line index. The documentation is up-to-date and helpful (but not on-demand). Score: Excellent.

Ami Pro 2.0 takes much effort to learn. It's quite easy to use. This is partly due to Lotus' "SmartIcons," which allow on-screen customization for special functions. The ability to define numerous user preferences and the number of developers' kits available for $69.95 shipping and handling. Score: Good.

Describe's ease of use improves with familiarity. The program's menu language and its ability to customize the menus and screen appears to enhance the ease of use for experienced users. The absence of a solid menu merge error, automatic footnotes, footnote checkers, and the capability to cut and copy within a document. The documentation is up-to-date and helpful (but not on-demand). Score: Excellent.

Lotus offers unlimited technical support from 8:30 a.m. to 8 p.m. during the typical workday. Lotus also offers BBS support on Compute!Net support, corporate-extended support, and a 30-day money-back guarantee. Score: Excellent.

Describe offers 90 days of technical support from 8 a.m. to 5 p.m. Pacific time Monday through Friday. The company also offers BBS and fax support. Score: Satisfactory.

Describe's technical support was extremely helpful each time we called. We had to wait for a callback once, but we received it promptly. Score: Very Good.

Describe offers competent word processing for Windows users at the standard price of $495. The program does a fine job with routine documents, but its lack of footnotes and sophisticated mail merge functions make it unsuitable for most office environments. The superior macro facility, however, may help. Score: Satisfactory.

Describe's technical support is helpful and friendly. Although not the best, the technician was polite and understood our needs. Score: Satisfactory.

At $495, Legacy is less powerful than Word, Ami Pro, and WordPerfect. It is a fine tool for people interested in desktop publishing, but it is a fine tool for people interested in desktop publishing. The company also offers BBS and fax support, and a document management system. Score: Satisfactory.

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Company: Lotus Development Corp.
Word Processing Division, 5600 Glenridge Drive, Atlanta, GA 30342 (800) 831-8761.

Company: Describe Inc. 4047 N. Folsom Blvd., Sacramento, CA 95818 (916) 464-1111.

Company: NBI Inc., 3375 Mitchell Lane, P.O. Box 9001, Boulder, CO 80301 (800) 334-89, (303) 434-1111, (303) 434-5740.
Microsoft Word for Windows

WordPerfect for Windows

WordStar for Windows

DESKTOP DOCUMENTATION

WordPerfect documentation consists of a workshop and a reference manual. The workshop illustrates the basic features of the program and provides a quick and easy tutorial using documents supplied with the program. Unfortunately, WordPerfect's documentation is not as comprehensive and detailed as the top-rated programs. Score: Satisfactory.

WordStar for Windows has a reference manual, getting-started booklet, a user manual, and a quick-reference book. WordStar’s documentation is fairly complete, and it includes an on-line tutorial. WordStar’s documentation includes on-line documentation and an on-line tutorial. Beginners will find the basic features of the program relatively easy to learn, although the complexity of options and the frame structure can be confusing. The documentation and on-line help provide a good deal of assistance. Score: Good.

The complexity of these products keeps new users from being able to learn them. Documentation and user-preference features are not well documented. WordPerfect for Windows is also easy to use, although you are not creating a complete document. Windows provides the necessary tools to create a complete document. WordPerfect for Windows is also easy to use, although you are not creating a complete document. Windows provides the necessary tools to create a complete document.

The complexity of these products keeps new users from being able to learn them. Documentation and user-preference features are not well documented. WordPerfect for Windows is also easy to use, although you are not creating a complete document. Windows provides the necessary tools to create a complete document. A good rule of thumb is to use the on-line help and documentation as a guide. WordPerfect for Windows is also easy to use, although you are not creating a complete document. Windows provides the necessary tools to create a complete document.

WordPerfect offers support policies that are easy to use. The program offers multiple ways of accomplishing tasks, and the tool bar and keyboard can be customized. Command shortcuts keys help speed a variety of options, and you can customize the appearance of the screen. The support of a macro facility reduces the complexity of one of these products.

WordPerfect offers support policies that are easy to use. The program offers multiple ways of accomplishing tasks, and the tool bar and keyboard can be customized. Command shortcuts keys help speed a variety of options, and you can customize the appearance of the screen. The support of a macro facility reduces the complexity of one of these products.

Technical support was friendly, and our questions were answered promptly and accurately. Support was friendly and helpful, and we were able to get through with minimal time on hold. Score: Very Good.

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At $495, Word for Windows is the most powerful and easiest product to use in this group. The one feature it lacks is the capability to link frames and story lines. Score: Excellent.

Sold at the same $495 price as the full-featured programs such as Word for Windows, Ami Pro 2.0, or WordPerfect. WordStar for Windows for a decent value. WordStar has a solid set of features, although it lacks some features that higher-end products have such as_word processing capabilities.


WordStar offers unlimited technical support. Monday morning through Friday from 7 a.m. to 6 p.m. Mountain time, and non-commercial user support 24 hours a day. There is also BBS support, fax support, and corporate policies. Score: Very Good.


HOW WE TEST

Windows professional word processors

We score scores for supporting dynamic links through DOORS and O.R. and for saving and importing the file from WordPerfect 5.1. DOS. We also test the time it takes to record the changes, to perform a global search and replace, to alter the margins and repaginate the document, to change the base font, and repaginate, to dump to the bottom (by pressing Ctrl-End), and to generate a table of contents. In tests with our complex file, we time opening, saving, printing, and the time it takes to display a page preview. We also time searching for the last word in the document, performing a global search and replace, reformattting by changing a font and repaginate, jumping to bottom again, by pressing Ctrl-End, cutting and pasting, and saving a PCX and an EPS file. In addition, we take into account the overall speed of the application when manipulating and repaginating a document. None of the products reviewed here receive an excellent because of consistent sluggish performance.

Windows professional word processors

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<td>0.02</td>
<td>0.08</td>
<td>0.04</td>
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<td>1:19</td>
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<td>0.13</td>
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<td>0.03</td>
<td>0.14</td>
<td>NA</td>
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<td>0.07</td>
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<td>0.17</td>
<td>0.13</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Print to QMS PS 8.0</td>
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<td>2:48</td>
<td>NA</td>
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<td>0.21</td>
<td>1:01</td>
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<tr>
<td>Jump to bottom</td>
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<td>0.04</td>
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<td>1:14</td>
<td>5:24</td>
<td>5:28</td>
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<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Jump to bottom</td>
<td>0.04</td>
<td>NA</td>
<td>0.10</td>
<td>&lt;1</td>
<td>0.06</td>
<td>0.17</td>
</tr>
<tr>
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<td>0.09</td>
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<td>0.27</td>
<td>0.07</td>
<td>0.08</td>
<td>NA</td>
</tr>
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<td>Place EPS file</td>
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<td>NA</td>
<td>0.17</td>
<td>0.05</td>
<td>0.07</td>
<td>NA</td>
</tr>
</tbody>
</table>