
Text starts here.¹ One or two-digit footnote numbers are OK.²²

Text boxes are character-anchored, top-aligned, opaque with text wrapping around the largest side, and change line height. The default width is 6.5 in; the height expands to fit the content. The inside border space is 0.167 in, the border is a single line, and there's no outside border space. If I want to shrink a box to smaller width, I should set a gutter with the Format/Columns dialog, else the box frame will abut the text in the next column. Default style in the box is BoxText.

MathType boxes such as xyz use the Inline Equation graphics style. They're character-anchored, baseline-aligned, opaque with text wrapping around both sides, and they don't change line height. They expand to fit the content and have no border. The font is CentSchbook BT Roman 11 pt. This may make the content appear small in *WordPerfect* displays but not in *Acrobat reader*.

Figure boxes use the Figure or Image graphics style. They're character-anchored, top-aligned, transparent (behind text), and they don't change line height. The default width is 3.25 inches, half the text width on the page, and the height adjusts to retain proportions. They have no border. If I want a smaller figure, I should make it smaller in the source program, because *WordPerfect* will shrink things that shouldn't be shrunk.

Watermark boxes are page-anchored, transparent (behind text), and full-sized. They use the Image content type.

Fonts and styles

These fonts are for documents with 12-point characters, 5 lines per inch. They are to be used by *WordPerfect* in document production, and rendered by *Acrobat distiller* and *Acrobat reader*. They're all True Type fonts. (Printer fonts, logically, are tabu.) Documents are to be printed by *Acrobat reader*.

¹ Footnote

²² Another footnote.

Book titles, etc.

AvantGarde Md BT Medium 12 pt bold, available via style -Title. (My style names start with - so they'll be listed at the head of the style menu.)

Issues:

1. There should be no routine need for the regular typeface.
2. AvantGarde Bk BT is too condensed.
3. The line spacing is 0.20.
4. Incorporating special symbols or fonts in titles in books will require ad hoc adjustments.

```

ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$%^&*()_+={}[]; "" " <, > .?/~`
ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$%^&*()_+={}[]; "" " <, > .?/~`
ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$%^&*()_+={}[]; "" " <, > .?/~`
ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$%^&*()_+={}[]; "" " <, > .?/~`

```

Box text

This is reserved for text in boxes. Currently it's the same as the default style for courseware and book text. But I might want to make it one point smaller.

Code

Monospace 821 Roman 10.8 pt regular, available via style -Code. This is for filenames, key names, C++ code, URL's, email addresses, and *Mathematica* code.

Issues:

1. There should be no need for italics.
2. The line spacing is 0.18, which is a problem if a whole line has this style, and lines above and/or below have spacing 0.20.
3. Lowercase is a little too high: AAAAaaaa. That may look bad, and cause me to make inline code smaller.

Text then $a[k] = (b - c * \text{Mate}(x - 1.5)) / (44 + f(Z))$
 then filename.xyz.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()_-=+{}[]:; “” ‘ ’ <, >. ? / ~ `

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()_-=+{}[]:; “” ‘ ’ <, >. ? / ~ `

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()_-=+{}[]:; “” ‘ ’ <, >. ? / ~ `

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()_-=+{}[]:; “” ‘ ’ <, >. ? / ~ `

Courseware and book text

CentSchbook BT Roman 12 pt, set in the template that I use for all documents.

Issues:

1. The line spacing is 0.20+. I don't understand that, because I thought this font was 12 on 14 pt., but $14 \text{ pt} = 14/72 \text{ in} = 0.19444 < 0.20$. Probably it's this: when it measures 0.20 on the status line, it really means 0.19444, and it has to catch up every so often.
2. Italics tend to collide; I must microspace.
3. Some of *WordPerfect*'s special European characters don't match this in height or design, so I must adjust them.
4. I use this instead of other versions of the same typeface because others once collided with my special mathematics characters and Greeks: *WordPerfect* wouldn't tolerate presence of both. I don't know if this is still true.
5. Other versions have different italic *a* and *f*.
6. *Acrobat 4* installation replaces this font with a variant that doesn't work. I always have to undo that. *Acrobat 5* doesn't seem to have this problem.
7. I think *Acrobat PDFWriter* renders its italics too slanted.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()_-=+{}[]:; “” ‘ ’ <, >. ? / ~ `

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()_-=+{}[]:; “” ‘ ’ <, >. ? / ~ `

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()_-=+{}[]:; “” ‘ ’ <, >. ? / ~ `

**abcdefghijklmnopqrstuvwxy
 0123456789!@#% ^ &*()_ - += {} [] ; " " <, > . ? / ~ `**
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxy
0123456789!@#% ^ &*()_ - += {} [] ; " " <, > . ? / ~ `

Courseware titles, etc.

I use bold to match text font.

Date stamp, etc.

Futura Lt BT Light 8.5 pt, available via style -DateStamp. This is for date stamps and other running headers and footers that should be unobtrusive and distinguished from the rest of the document.

Issues:

1. The line spacing is 0.14+.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxy
 0123456789!@#% ^ &*()_ - += {} [] ; " " <, > . ? / ~ `
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxy
 0123456789!@#% ^ &*()_ - += {} [] ; " " <, > . ? / ~ `
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxy
 0123456789!@#% ^ &*()_ - += {} [] ; " " <, > . ? / ~ `
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxy
 0123456789!@#% ^ &*()_ - += {} [] ; " " <, > . ? / ~ `

Formal-letter text

Zapf Humanist BT Regular 12 pt, available via template.

Issues:

1. The line spacing is 0.20+. This presents no problem, because it will ordinarily be the main font in any document that uses it.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxy
 0123456789!@#% ^ &*()_ - += {} [] ; " " <, > . ? / ~ `

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$\$%^&*()-+={}[]:; "" " <, >. ?/ ~ `

ABCDEFGHIJKLMN**OPQRSTU****VWXYZ**
abcdefghijklmnop**qrstuvw****xyz**
0123456789!**@#\$\$%****^&*()****-+=****{}****[]:;** "" " <, >. ?/ ~ `

ABCDEFGHIJKLMN**OPQRSTU****VWXYZ**
abcdefghijklmnop**qrstuvw****xyz**
0123456789!**@#\$\$%****^&*()****-+=****{}****[]:;** "" " <, >. ?/ ~ `

Fractions

Here's how they're made:

Suprsct on, #, Suprsct off, -.053, Italc on, Times New Roman Regular on, 6-230, Times New Roman Regular off, Italc off, +.018, Fine on, #, Fine off, +.027

Issues:

1. They look slightly different in *WordPerfect* and *Acrobat distiller*.
2. Times New Roman Regular is used to work around a *WordPerfect* and/or *Acrobat distiller* bug that renders the slash invisible.
3. I fine-tuned the microspaces for and aft of the slash according to the adjacent digits.

0/0	1/0	2/0	3/0	4/0	5/0	6/0	7/0	8/0	9/0
0/1	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1
0/2	1/2	2/2	3/2	4/2	5/2	6/2	7/2	8/2	9/2
0/3	1/3	2/3	3/3	4/3	5/3	6/3	7/3	8/3	9/3
0/4	1/4	2/4	3/4	4/4	5/4	6/4	7/4	8/4	9/4
0/5	1/5	2/5	3/5	4/5	5/5	6/5	7/5	8/5	9/5
0/6	1/6	2/6	3/6	4/6	5/6	6/6	7/6	8/6	9/6
0/7	1/7	2/7	3/7	4/7	5/7	6/7	7/7	8/7	9/7
0/8	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8
0/9	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	9/9

Greek

SymbolProp BT Regular 12 pt, available via macros.

Issues:

1. Uppercase is a little shorter than my text font, but close enough.
2. The line spacing is 0.19. This will cause no problem unless a line is entirely that way.
3. Lowercase regular is in fact italic, but that's OK. The official lowercase italic is too slanted to be useful.
4. *MathType* uses Symbol not SymbolProp, and that has no italic form. I can't change it to SymbolProp. Therefore I set SymbolProp regular as the User1 style in *MathType*.
5. I didn't like the uppercase epsilon, so I use font Math1 for it. It's all right for uppercase regular Greek in *MathType* but I have to adjust the font manually (other style) to get the uppercase italic.
6. I used the alternative forms for φ and Υ .

AAAA ABΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
 AAAA *ABΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*
 aaaa αβγδεζηθικλμνξοπρστυφχψω
 aaaa *αβγδεζηθικλμνξοπρστυφχψω*
AAAA ABΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
AAAA *ABΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*
aaaa αβγδεζηθικλμνξοπρστυφχψω
aaaa *αβγδεζηθικλμνξοπρστυφχψω*

Math bold

Times New Roman Regular 12 pt outline bold, available via style -MathBold.

Issues:

1. The outline feature doesn't show on the *WordPerfect* screen, but comes out OK in print and in *Acrobat*. I used to color this font but color is too startling in presentations.
2. The line spacing is 0.20.
3. There are perhaps better versions of a few letters among the special *WordPerfect*, *MathType*, and *Mathematica* fonts, but I opt for the general form. Those would appear properly in *WordPerfect*. For the *Mathematica* font I'd need a set of macros, because the character numbers are unusual. The *Mathematica* font looks too bold. Moreover, the *Mathematica* font can't be embedded in *Acrobat*.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 0123456789!@#\$%^&*()_ - + = { } [] : ; " ' < , > . ? / ~ `
 a b c d e f g h i j k l m n o p q r s t u v w x y z

*ABCDEFGHIJKLMNOPQRSTUVWXYZ
 0123456789!@#\$%^&*()_-=+={}[];: " ' < , > . ? / ~ `*

abcdefghijklmnopqrstuvwxyz

*ABCDEFGHIJKLMNOPQRSTUVWXYZ
 0123456789!@#\$%^&*()_-=+={}[];: " ' < , > . ? / ~ `*

abcdefghijklmnopqrstuvwxyz

*ABCDEFGHIJKLMNOPQRSTUVWXYZ
 0123456789!@#\$%^&*()_-=+={}[];: " ' < , > . ? / ~ `*

abcdefghijklmnopqrstuvwxyz

Math German

Fraktur BT Regular 12.8 pt, available via style -MathGerman.

Issues:

1. There should be no need for italics.
2. The line spacing is 0.20+, which could be a minor problem.
3. This font doesn't have the nonterminal ess character. To get that use Walbaum Fraktur 12.8 and the \ keystroke. That font, however, cannot be embedded in Acrobat.

*ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$%^&*()_-=+={}[];: " ' < , > . ? / ~ `*

*ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$%^&*()_-=+={}[];: " ' < , > . ? / ~ `*

*ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$%^&*()_-=+={}[];: " ' < , > . ? / ~ `*

*ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$%^&*()_-=+={}[];: " ' < , > . ? / ~ `*

Math script

TypoUpright BT 12.4 pt bold italic, available via style -MathScript.

Issues:

1. There should be no need for non-bold, non-italic.
2. It's a little shorter than my text font, but not obtrusively so.

- 3. It's line spacing is 0.20-
- 4. I made it the User2 style in *MathType*.
- 5. This font doesn't match the corresponding *Mathematica* characters. To get those use the Math5 font. However, that font cannot be embedded in *Acrobat*.

```

ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz
0123456789!@# $% ^ & * ( ) _ - + = { } [ ] ; : " ' < , > . ? / ~ `
ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz
0123456789!@# $% ^ & * ( ) _ - + = { } [ ] ; : " ' < , > . ? / ~ `
ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz
0123456789!@# $% ^ & * ( ) _ - + = { } [ ] ; : " ' < , > . ? / ~ `
ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz
0123456789!@# $% ^ & * ( ) _ - + = { } [ ] ; : " ' < , > . ? / ~ `

```

Mathematica input

Courier New Regular 12 pt bold, available via style -MathematicaInput.

Issues:

- 1. There should be no routine need for italics.
- 2. This seems bolder in *WordPerfect* than in *Mathematica*, so I'll look for a different variant.
- 3. The printer font Courier and the True Type font Courier 10 are unsuitable.
- 4. But the Courier 10 that I'm using for *Mathematica* output is OK. Maybe I'll use that for input and output both.
- 5. The line spacing is 0.19+, which shouldn't cause any problem.
- 6. I've decided this just looks bad, so I'll use the -Code style for this purpose.

```

ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz
0123456789!@# $% ^ & * ( ) _ - + = { } [ ] ; : " ' < , > . ? / ~ `
ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz
0123456789!@# $% ^ & * ( ) _ - + = { } [ ] ; : " ' < , > . ? / ~ `
ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz
0123456789!@# $% ^ & * ( ) _ - + = { } [ ] ; : " ' < , > . ? / ~ `
ABCDEF GHIJKL MNOPQR STUVWXY Z
abcdefghijklmnopqr stuvwxyz

```

0123456789!@#\$\$%^&*()_ -+={}[]:; " ' <, >. ?/ ~ `

Mathematica output

Courier 10 BT Roman 12 pt, available via style `-MathematicaOutput`.

Issues:

1. There should be no routine need for italics.
2. *Mathematica* uses Courier New regular, which is too weak.
3. The line spacing is 0.19+, which shouldn't cause any problem.
4. I've decided this just looks bad, so I'll use the `-Code` style for this purpose.

```

ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$$%^&*()_ -+={}[ ]:; " ' <, >. ?/ ~ `
ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$$%^&*()_ -+={}[ ]:; " ' <, >. ?/ ~ `
ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$$%^&*()_ -+={}[ ]:; " ' <, >. ?/ ~ `
ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$$%^&*()_ -+={}[ ]:; " ' <, >. ?/ ~ `

```

Memo text

Arial Regular, available via template and via style `-MemoText`.

Issues:

1. I'm not entirely happy with this. Alternatives are QuickType, Tahoma, and Zurich.
2. The line spacing 0.19+.

```

ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$$%^&*()_ -+={}[ ]:; " ' <, >. ?/ ~ `
ABCDEFGHIJKLMNPOQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789!@#$$%^&*()_ -+={}[ ]:; " ' <, >. ?/ ~ `
ABCDEFGHIJKLMNPOQRSTUVWXYZ

```

abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$%^&*()_+={ }[]:; " ' < , > . ? / ~ `
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 0123456789!@#\$%^&*()_+={ }[]:; " ' < , > . ? / ~ `

Non-Greek macros

Issues:

1. The fractions are incompatible with my handmade fractions on a later page. Moreover, some have serifs and some don't.
2. Times New Roman Regular is used sometimes to get around a *WordPerfect* and/or *Acrobat distiller* bug that renders invisible some high-numbered characters in *WordPerfect's* character-set 6.
3. Macros Sp, ``, and ``` insert 0.013, 0.027, 0.040 in. right microspaces.
4. Macros Hoch and Sub cause the next material entered to be superscripted or subscripted.

.wcm		.wcm		.wcm		.wcm	
'	'	compose	◦	inf	∧	notmember	∉
-	—	congruent	≡	infinity	∞	notparallel	∯
12	½	cross	×	integral	∫	of	◦
13	⅓	cup	∪	intersection	∩	or	∨
14	¼	deg	°	join	∨	parallel	//
18	⅛	dot	·	le	≤	partial	∂
23	⅔	dots	...	left	←	perp	⊥
34	¾	dotsaxis	⋯	lgquote	„	rgquote	“
38	⅜	dotsvert	:	line		right	→
58	⅝	double	”	mapsto	↪	section	§
78	⅞	down	↓	meet	∧	some	∃
aleph	ℵ	either	≠	member	∈	subset	⊆
all	∀	empty	∅	norm		sup	∨
angle	∠	end	◆	not	¬	times	×
approx	≈	ge	≥	noteq	≠	triangle	△
arc	⌒	grad	∇	notge	≧	triple	≡
beth	beth	iff	↔	notgt	⋈	union	∪
bullet	•	implies	⇒	notle	⋈	up	↑
cap	∩	incongruent	≠	notlt	⋈	yields	⊢

Roman letters and symbols in formulas

Match the text font.

Issues:

1. The hyphen - is not minus. Use the en-dash –.
2. None of the plus/minus characters match. The closest match is the keyboard + and the en dash –, which is produced by a macro on the numeric keyboard. Formulas with both in close proximity must be adjusted by hand.
3. For most nonalphabetic symbols I have macros. Use them instead of the Ctrl-W characters, because I've found the best versions.
4. *MathType* makes the font size too large, so I have to cut its standard size down to 11 pt. This is really bad, because the issue is with the print size not the display size: A A .

Customized keyboard interpretation

<i>keystroke</i>	<i>plays macro</i>	<i>with effect</i>
<Num - >	-	minus sign
<Ctrl ↑ >	hoch	superscript follows
<Ctrl ↓ >	sub	subscript follows
<Ctrl ' >	'	prime
<Ctrl ` >	`	0.013 in. right microspace
<Alt ` >	`	0.013 in. right microspace