Samples of common TeX font encodings

Scott Pakin

scott+pkfh@pakin.org

August 5, 2020

The pkfix-helper program occasionally needs help from the user in selecting an appropriate TFM file to match a Type 3 font found in a PostScript document. This document assists with the task of identifying fonts by presenting character-by-character comparisons of all 256 character positions in a selection of common TeX fonts. The following encodings are represented:

- TeX text (e.g., *cmr10*)

- TeX math italic (e.g., *cmmi10*)

- TeX math symbols (e.g., *cmsy10*, *msam10*, and *msbm10*—each of which provides different symbols)

- LaTeX symbols (e.g., *lasy10*)

- TeX math extension (e.g., *cmex10*)

- TeX base 1 encoding (e.g., *ptmr8r*)

- Adobe standard encoding (e.g., *ptmr*)

- Adobe symbol encoding (e.g., *psyr*)

- TeX extended ASCII (e.g., *cmtex10*)

- extended TeX font encoding (e.g., *ecrm1000*)

- TeX text companion symbols (e.g., *tcrm1000*)

- TeX text subset (e.g., *eufm10*, which provides fraktur letters for mathematical typesetting)

- unspecified (e.g., *stmary10*; *wasy10* is also included here although it erroneously claims to be TeX text)

The following encodings are not shown in this document because the glyphs they provide exhibit little variety and are therefore relatively easy to identify:

- LaTeX line (e.g., *line10*)—line segments and arrowheads in different lengths and orientations

- LaTeX circle (e.g., *lcircle10*)—circles and 90° arcs in different sizes

- XY line segments (e.g., *xyline10*)—line segments in different orientations

- XY miscellaneous (e.g., *xymisc*)—90° arcs in different sizes

- XY quarter circles (e.g., *xyqc10*)—small 90° arcs in different orientations

- XY-pic 1/8 circles (e.g., *xycirc10*)—45° arcs in different sizes

- XY-pic directional (e.g., *xyatip10*, *xybsql10*, *xybtip10*, and many others)—small-degree arcs in different orientations

- XY-pic semidirectional (e.g., *xydash10*)—short line segments in different orientations

To use the tables that appear below, first produce "before" and "after" font sheets using pkfix-helper's --ps and --tex options. (See the pkfix-helper documentation for details.) For each font in which the "after" characters are completely different from the "before" characters—as opposed to merely the wrong selection of font size, weight, or slant—make a note of the font that pkfix-helper announced it had selected. Find the table and column in which the "before" symbol exists and the "after" symbol is associated with the font selected by pkfix-helper. The font associated with the "before" symbol is what should be specified in a --force option to pkfix-helper. For example, consider the observations shown in Figure 1. We find that the "after" character, "$\boldsymbol{\eta}$", is associated with *cmmi10* (the same typeface used for *cmmib10* but in book weight) at character position 17. The "before" character, "$\equiv$", is also present in position 17 and is associated with *cmsy10*. Therefore, we should re-run pkfix-helper with the --force="Fj=cmsy10 @ 1.2X" option to force it to associate document font *Fj* with *cmsy10* instead of *cmmib10*.

1

Once the correct typeface is identified, the font size may need adjusting. In the preceding example, `--force="Fj=cmsy9"` may produce less mismatch for `cmmib10 @ 1.2X` than does `--force="Fj=cmsy10 @ 1.2X"`. Making such a determination requires human involvement. A suggested approach is first to let pkfix-helper identify the size and scale automatically by specifying `--force="Fj=cmsy*@*"`. If doing so produces a poor match or selects an unlikely scale factor, then the user should manually adjust the font size and/or scale factor.

```
pkfix-helper:   Processing Fj ...   done (cmmib10 @ 1.2X, mismatch=0.00073)

--ps file:      Fj:    ≡
--tex file:     Fj:    η
```

Figure 1: Sample observations of pkfix-helper output and output files

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
cmr10	Γ	Δ	Θ	Λ	Ξ	Π	Σ	Υ	Φ	Ψ	Ω	ff	fi	fl	ffi	ffl
cmmi10	Γ	Δ	Θ	Λ	Ξ	Π	Σ	Υ	Φ	Ψ	Ω	α	β	γ	δ	ϵ
cmsy10	−	·	×	∗	÷	⋄	±	∓	⊕	⊖	⊗	⊘	⊙	◯	∘	●
msam10	⊡	⊞	⊠	□	■	▪	◇	◆	↺	↻	⇌	⇋	⊟	⊩	⊫	⊨
msbm10	≨	≩	⪇	⪈	⊀	⊁	⋠	⋡	⪇	⪈	⪉	⪊	⋦	⋧	⪵	≠
lasy10		◁	⊴	▷	⊵											
cmex10	(	)	[	]	⌊	⌋	⌈	⌉	{	}	⟨	⟩	∣	∥	╱	╲
ptmr8r		·	fi	fl	⁄	˝	Ł	ł	̨	˚	ˇ	˘	‾		Ž	ž
ptmr	Γ	Δ	Θ	Λ	Ξ	Π	Σ	Υ	Φ	Ψ	Ω	↑	↓	'	¡	¿
psyr																
cmtex10	·	↓	α	β	∧	¬	∊	π	λ	γ	δ	↑	±	⊕	∞	∂
ecrm1000	`	´	^	~	¨	˝	˚	ˇ	˘	‾	˙	¸	˛	‚	‹	›
tcrm1000	`	´	^	~	¨	˜	˚	ˇ	˘	−	˙	˒	¸	'		
eufm10	∂	ð	f	f	g	ℓ	t	u								
stmary10	←	→	↑	↓	⋏	⋎	≺	≻	⋎	⋏	⊖	φ	∥	∖	⊥	⊗
wasy10	△	◁	⊴	▷	⊵	∴	℧	☎	✓	↯	♠	♪	⌡	⌡	°	♫

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
cmr10	ı	ȷ	`	´	ˇ	˘	¯	˚	¸	ß	æ	œ	ø	Æ	Œ	Ø
cmmi10	ζ	η	θ	ι	κ	λ	μ	ν	ξ	π	ρ	σ	τ	υ	ϕ	χ
cmsy10	≍	≡	⊆	⊇	≤	≥	⪯	⪰	∼	≈	⊂	⊃	≪	≫	≺	≻
msam10	↠	↞	⇇	⇉	⇈	⇊	↦	↧	↑	↓	↣	↢	⇆	⇄	↰	↱
msbm10	⪦	⪧	⪨	⪩	≨	≩	⪵	≢	≊	≋	⪥	⪤	≁	≠	╱	╲
lasy10																
cmex10	(	)	(	)	[	]	⌊	⌋	⌈	⌉	{	}	⟨	⟩	╱	╲
ptmr8r	˘	ı													`	'
ptmr	ı		`	´	ˇ	˘	−	˚	¸	ß	æ	œ	ø	Æ	Œ	Ø
psyr																
cmtex10	⊂	⊃	∩	∪	∀	∃	⊗	⇆	←	→	≠	⋄	≤	≥	≡	∨
ecrm1000	"	"	„	«	»	–	—	₀	₁	ɟ	ff	fi	fl	ffi	ffl	
tcrm1000	"	"	‼	،		–	—	←	→	⌢	⌢	⌢	⌢			
eufm10																
stmary10	⊛	⊕	⊙	⊘	⊘	⊚	⊕	⊖	⊞	⊡	⊡	⊡	◻	⊡	⊡	□
wasy10	◄	►	↯	℧	℧	⊘	⊕	♈	⌐	♀	♂	¤	☿	∝	⋪	∅

	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
cmr10	˘	!	”	#	$	%	&	’	(	)	∗	+	,	-	.	/
cmmi10	ψ	ω	ε	ϑ	ϖ	ϱ	ς	φ	↼	↽	⇀	⇁	⌣	⌢	▷	◁
cmsy10	←	→	↑	↓	↔	↗	↘	≃	⇐	⇒	⇑	⇓	⇔	↖	↙	∝
msam10	⇝	⇜	⊬	⊭	≗	⋝	⋛	⋚	⊸	∴	∵	÷	≜	⋎	⋏	≋
msbm10	⊊	⊋	⊈	⊉	≠	⪇	⪈	⪉	⊊	⊋	∉	≢	∦	↰	↱	≉
lasy10									‹	›	ˆ	ˇ				
cmex10	(	)	[	]	⌊	⌋	⌈	⌉	{	}	⟨	⟩	/	\	/	\
ptmr8r		!	"	#	$	%	&	’	(	)	*	+	,	-	.	/
ptmr		!	"	#	$	%	&	,	(	)	*	+	,	-	.	/
psyr		!	∀	#	∃	%	&	϶	(	)	*	+	,	−	.	/
cmtex10		!	"	#	$	%	&	,	(	)	∗	+	,	−	.	/
ecrm1000	˘	!	"	#	$	%	&	,	(	)	*	+	,	-	.	/
tcrm1000	ħ			$				'			*		,	˭	.	/
eufm10		!					&	'	(	)	*	+	,	—	.	/
stmary10	↯	⋀	✕	⚲	↙	↘	⋋	⋌	⫽	⫻	⟲	∫	◯	⇕	⅄	⅄
wasy10	●	↻	↺	○	☾	☽	☿	☿	‹	›	^	ˇ	☺	☻	☼	☹

	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
cmr10	0	1	2	3	4	5	6	7	8	9	:	;	¡	=	¿	?
cmmi10	o	ı	2	3	4	5	6	7	8	9	.	,	<	/	>	⋆
cmsy10	′	∞	∈	∋	△	▽	/	∣	∀	∃	¬	∅	ℜ	ℑ	⊤	⊥
msam10	⋘	⋙	≼	≽	≾	⋜	≪	≫	∖	−	≑	≓	≿	≧	⋛	⋧
msbm10	⋠	⋡	⋨	⋩	⊀	⊁	⊀	⊁	↔	↛	⇎	⇏	⇔	↔	⊛	∅
lasy10	℧	⋈	□	◇							∼	⤳	⊏	⊐		
cmex10	⌈	⌉	⌈	⌉	⌊	⌋	∣	∣	⌜	⌝	⌞	⌟	{	}	'	∣
ptmr8r	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
ptmr	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
psyr	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
cmtex10	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
ecrm1000	0	1	2	3	4	5	6	7	8	9	:	;	‹	=	›	?
tcrm1000	o	ı	2	3	4	5	6	7	8	9			⟨	—	⟩	
eufm10	o	1	2	3	4	5	6	7	8	9	:	;		=		?
stmary10	↖	↗	◁	▷	⊘	⊘	Ⓥ	Ⓐ	⟦	⫴	◐	⊘	⊗	⊘	Ⓥ	Ⓐ
wasy10	℧	⋈	□	◇	⊠	⌂	✚	⬡	◯	⬡	∼	⤳	⊏	⊐	≲	≳

4

	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
cmr10	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
cmmi10	∂	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
cmsy10	ℵ	𝒜	ℬ	𝒞	𝒟	ℰ	ℱ	𝒢	ℋ	ℐ	𝒥	𝒦	ℒ	ℳ	𝒩	𝒪
msam10	⊏	⊐	▷	◁	⊵	⊴	★	◊	▼	▶	◀	→	←	△	▲	▽
msbm10	⊭	𝔸	𝔹	ℂ	𝔻	𝔼	𝔽	𝔾	ℍ	𝕀	𝕁	𝕂	𝕃	𝕄	ℕ	𝕆
lasy10																
cmex10	\	)	∣	∣	⟨	⟩	⊔	⊔	∮	∫	⊙	⊙	⊕	⊕	⊗	⊗
ptmr8r	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
ptmr	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
psyr	≅	A	B	X	Δ	E	Φ	Γ	H	I	ϑ	K	Λ	M	N	O
cmtex10	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
ecrm1000	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
tcrm1000														Υ		○
eufm10		𝔄	𝔅	ℭ	𝔇	𝔈	𝔉	𝔊	ℌ	ℑ	𝔍	𝔎	𝔏	𝔐	𝔑	𝔒
stmary10	□	∈	∋	⊞	⊟	∌	⊟	⊟	⌠	∫	⟦	⟧	⦇	⦈	&	∞
wasy10	≈	✶	✳	✡	⬠	⋆	▽	◖	◗	◐	◑	▲	▼	§	€	3

	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
cmr10	P	Q	R	S	T	U	V	W	X	Y	Z	[	"	]	^	˙
cmmi10	P	Q	R	S	T	U	V	W	X	Y	Z	♭	♮	♯	⌣	⌢
cmsy10	𝒫	𝒬	ℛ	𝒮	𝒯	𝒰	𝒱	𝒲	𝒳	𝒴	𝒵	∪	∩	⊎	∧	∨
msam10	⊟	⋛	⋗	⋚	⋜	¥	⟹	⟸	✓	⋎	⊼	⋏	∠	⦟	⊴	∝
msbm10	ℙ	ℚ	ℝ	𝕊	𝕋	𝕌	𝕍	𝕎	𝕏	𝕐	ℤ	⌢	⌣	∼	≈	
lasy10																
cmex10	∑	∏	∫	∪	∩	⊎	⋀	⋁	∑	∏	∫	∪	∩	⊎	⋀	⋁
ptmr8r	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
ptmr	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
psyr	Π	Θ	Ρ	Σ	Τ	Υ	ς	Ω	Ξ	Ψ	Ζ	[	∴	]	⊥	_
cmtex10	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
ecrm1000	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
tcrm1000								Ω				⟦		⟧	↑	↓
eufm10	𝔓	𝔔	ℜ	𝔖	𝔗	𝔘	𝔙	𝔚	𝔛	𝔜	ℨ	[		]	^	
stmary10	⊲	⊳	⊄	⊅	‖	‖	⫴	⫴	′	/	∣	∣	∣	⟷	←	→
wasy10	γ	´	`	⌘	f	ə	♂	♂	♃	♄	♆	☿	♇	♀	⊕	♋

	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
cmr10	‘	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
cmmi10	ℓ	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
cmsy10	⊢	⊣	⌊	⌋	⌈	⌉	{	}	⟨	⟩	∣	∥	↕	⇕	\	≀
msam10	⌣	⌢	⋐	⋑	⋓	⋒	⋋	⋌	⋗	≊	⊐	⊒	≐	⋄	⋘	⋙
msbm10	⊣	⅁					℧	ð	≊	⊐	⊒	⊐	⋖	⋗	⋉	⋊
lasy10																
cmex10	⎴	⎵	⌢	⌢	⌢	∼	∼	∼	[	]	⌊	⌋	⌈	⌉	{	}
ptmr8r	‘	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
ptmr	‘	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
psyr		α	β	χ	δ	ε	φ	γ	η	ι	φ	κ	λ	μ	ν	o
cmtex10	‘	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
ecrm1000	‘	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
tcrm1000	`		⋆	◦⎮◦	†								⊘	∞	♪	
eufm10		𝔞	𝔟	𝔠	𝔡	𝔢	𝔣	𝔤	𝔥	𝔦	𝔧	𝔨	𝔩	𝔪	𝔫	𝔬
stmary10	▽	△	Υ	人	⊓	□	‖	‖‖	▽	△	Υ	人	⊓	□	‖	‖‖
wasy10	♍	♎	♏	↗	♑	≈≈	♓	¢	‰	þ	Þ	ð	ɔ	✖	⇑	⇓

	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
cmr10	p	q	r	s	t	u	v	w	x	y	z	–	—	”	˜	¨
cmmi10	p	q	r	s	t	u	v	w	x	y	z	ι	ȷ	℘	→	⌢
cmsy10	√	Ⅱ	∇	∫	⊔	⊓	⊑	⊒	§	†	‡	¶	♣	◇	♡	♠
msam10	⌐	⌐	®	Ⓢ	⊩	∔	⌣	≂	⌐	⌐	✠	∁	⊤	⊙	⊛	⊖
msbm10	∣	∥	╲	∼	≈	≊	≋	≋	⌢	⌢	ℱ	ϰ	𝕜	ℏ	ℏ	ǝ
lasy10																
cmex10	√	√	√	√	√	∣	⌈	‖	↑	↓	⌢	⌢	⌣	⌣	⇑	⇓
ptmr8r	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	¨
ptmr	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	¨
psyr	π	θ	ρ	σ	τ	υ	ϖ	ω	ξ	ψ	ζ	{	|	}	~	
cmtex10	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	∫
ecrm1000	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	–
tcrm1000															~	⸗
eufm10	𝔭	𝔮	𝔯	𝔰	𝔱	𝔲	𝔳	𝔴	𝔵	𝔶	𝔷			"		ɪ
stmary10	⍋	⟦	⟦	⎮	⟦	⎮	⎮	‖	⍋	⟧	⟧	⟧	⎮	⟧	‖	‖
wasy10	⊟	⊞	∫	∬	∭	∮	∯	∫	∬	∭	∮	∯		⌑	□	⅄

	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r	ˆ	~	'	ƒ	„	…	†	‡	ˆ	‰	Š	‹	Œ			
ptmr			Ç	Í	Î	ã	ë	è	š	ž	Đ					
psyr																
cmtex10																
ecrm1000	Ă	Ą	Ć	Č	Ď	Ě	Ę	Ğ	Ĺ	Ľ	Ł	Ń	Ň	Ŋ	Ő	Ŕ
tcrm1000	˘	˛	„	‶	†	‡	‖	‰	•	℃	$	¢	f	ℂ	Ẃ	ℕ
eufm10																
stmary10																
wasy10																

	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r				"	"	•	–	—	~	™	š	›	œ			Ÿ
ptmr			Š						Ÿ		Ž					
psyr																
cmtex10																
ecrm1000	Ř	Ś	Š	Ş	Ť	Ţ	Ű	Ů	Ÿ	Ź	Ž	Ż	IJ	İ	đ	§
tcrm1000	Ğ	P	£	Ř	?	¿	đ	™	‰	¶	ℬ	№	%	℮	○	℠
eufm10																
stmary10																
wasy10																

	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r		¡	¢	£	¤	¥	¦	§	¨	©	ª	«	¬	-	®	¯
ptmr		¡	¢	£	/	¥	ƒ	§	¤	©	"	«	‹	›	fi	fl
psyr		ϒ	′	≤	/	∞	ƒ	♣	♦	♥	♠	↔	←	↑	→	↓
cmtex10																
ecrm1000	ă	ą	ć	č	ď	ě	ę	ğ	Í	ľ	ł	ń	ň	ŋ	ő	ŕ
tcrm1000	{	}	¢	£	¤	¥	¦	§	¨	Ⓒ	ª	Ɔ	¬	Ⓟ	Ⓡ	—
eufm10																
stmary10																
wasy10																

	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿
ptmr	°	–	†	‡	·		¶	•	‚	„	"	»	…	‰		↵
psyr	°	±	″	≥	×	∝	∂	•	÷	≠	≡	≈	…	|	—	↵
cmtex10																
ecrm1000	ř	ś	š	ş	ť	ţ	ű	ů	ÿ	ź	ž	ż	ij	ı	¿	£
tcrm1000	°	±	²	³	´	µ	¶	·	※	¹	º	√	¼	½	¾	€
eufm10																
stmary10																
wasy10																

	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
ptmr	À	Á	Â	Ã	Ä	Å	Æ	Ç̇	È	É	Ê	Ë	Ì	˝	˛	Ï
psyr	ℵ	ℑ	ℜ	℘	⊗	⊕	∅	∩	∪	⊃	⊇	⊄	⊂	⊆	∈	∉
cmtex10																
ecrm1000	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
tcrm1000																
eufm10																
stmary10																
wasy10																

	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
ptmr	—	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	⇓
psyr	∠	∇	®	©	™	∏	√	·	¬	∧	∨	⇔	⇐	⇑	⇒	⇓
cmtex10																
ecrm1000	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	Œ	Ø	Ù	Ú	Û	Ü	Ý	Þ	SS
tcrm1000							×									
eufm10																
stmary10																
wasy10																

	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
ptmr	à	á	â	ª	ä	å	ç	Ł	é	ê	°	ì	í	î	ï
psyr	◊	⟨	®	©	™	Σ	⌠	|	⌡	⌈	|	⌊	⌈	⟨	⌊	|
cmtex10																
ecrm1000	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
tcrm1000																
eufm10																
stmary10																
wasy10																

	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255
cmr10																
cmmi10																
cmsy10																
msam10																
msbm10																
lasy10																
cmex10																
ptmr8r	ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ
ptmr		ñ	ò	ó	ô	õ	ö		ł	ù	ú	û	ü	ý	þ	ÿ
psyr		⟩	⌡	⌈	|	⌋	⟩	|	⌋	⌉	|	⌋	⟩	⟩	⌋	
cmtex10																
ecrm1000	ð	ñ	ò	ó	ô	õ	ö	œ	ø	ù	ú	û	ü	ý	þ	ß
tcrm1000							÷									
eufm10																
stmary10																
wasy10																

10