

あ“あ・い Ryumin-Light  
あ“あ・い← IPA明朝 (ipam)  
あ“あ・い← KozMinPr6N-Regular  
あ“あ・い← IPA P明朝 (ipamp)  
あ 123 \relax

ここからは、欧文文字フォントは IPA EX ゴシック

#### 文字範囲の代入/取得テスト

「ô」は 9 番の文字範囲なので、和文扱いのはず  
iso8859-1 和文扱い:0 § ¶ ° £ ¥ ô  
iso8859-1 欧文扱い:1 § ¶ ° £ ¥ ô  
標準:1 § ¶ ° £ ¥ ô

#### 文字範囲の状況取得

0 1 0

#### 文字コード 文字範囲

6 8 9 -1

ほとんど欧文扱い。2 番は別（「あ」）和文扱いにもどる

#### Ticket #25121

あいうえお か き く け こ さ し す せ そ a  
あいうえお か き く け こ さ し す せ そ  
あいうえお さ し す せ そ

以下はJFM グルー挿入検証

JA-JA (penなし)

		F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 4 kern 1 20.0pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ア 63 (0.0+0.0)x10.0
あ	ア	----- F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 0 (for kinsoku) 6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 イ 63 (0.0+0.0)x10.0
あい		----- F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 0 (for kinsoku) 4 glue 0 28.20001pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ウ 63 (0.0+0.0)x10.0
あ	ウ	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 4 kern 1 20.0pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ア 63 (0.0+0.0)x10.0
い	ア	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 イ 63 (0.0+0.0)x10.0
い	イ	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 4 glue 0 14.1pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ウ 63 (0.0+0.0)x10.0
い	ウ	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ウ 63 (0.0+0.0)x10.0

JA-EN (penなし)

		F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 4 kern 1 12.1pt (from JFM) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
あ	a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
い	a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 う 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 0 (for kinsoku) 4 glue 0 31.40001pt (from JFM) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
う	a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 え 63 (0.0+0.0)x10.0 4 kern 1 17.3pt (from JFM) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
え	a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 お 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 0 (for kinsoku) 7 glue 0 16.50554pt plus 1.0pt minus 1.0pt (xkanjiskip) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
お	a	----- 8 glyph 256 a 62 (5.2002+0.03906)x5.49805

EN-JA (penなし)

		8 glyph 256 a 62 (5.2002+0.03906)x5.49805 3 penalty 0 0 (for kinsoku) 7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0
a	あ	----- 8 glyph 256 a 62 (5.2002+0.03906)x5.49805 3 penalty 0 0 (for kinsoku) 4 glue 0 14.1pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0
a	い	----- 8 glyph 256 a 62 (5.2002+0.03906)x5.49805 3 penalty 0 0 (for kinsoku) 4 kern 1 20.0pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 う 63 (0.0+0.0)x10.0
a	う	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 う 63 (0.0+0.0)x10.0

### JA-明 kern (pen なし)

	F glue 0 9.4pt plus 2.3pt minus 4.5pt
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 63 (0.0+0.0)x10.0
あ	4 kern 1 12.1pt (from JFM)
	8 kern 1 3.0pt
	-----
	2 hlist 0(8.8+1.2)x10.0 (packed)
い	.8 glyph 256 い 63 (0.0+0.0)x10.0
	8 kern 1 3.0pt
	-----
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 う 63 (0.0+0.0)x10.0
う	5 kern 1 -14.1pt (from 'lineend' in JFM)
	3 penalty 0 10000 (for kinsoku)
	4 glue 0 31.40001pt (from JFM)
	8 kern 1 3.0pt

### 明 kern-JA (pen なし)

	8 kern 1 3.0pt
	2 hlist 0(8.8+1.2)x10.0 (packed)
あ	.8 glyph 256 あ 63 (0.0+0.0)x10.0
	8 kern 1 3.0pt
	3 penalty 0 10000 (for kinsoku)
	4 glue 0 14.1pt (from JFM)
	2 hlist 0(8.8+1.2)x10.0 (packed)
い	.8 glyph 256 い 63 (0.0+0.0)x10.0
	8 kern 1 3.0pt
	4 kern 1 20.0pt (from JFM)
	2 hlist 0(8.8+1.2)x10.0 (packed)
う	.8 glyph 256 う 63 (0.0+0.0)x10.0

### JA-hbox (pen なし)

	F glue 0 9.4pt plus 2.3pt minus 4.5pt
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 63 (0.0+0.0)x10.0
	3 penalty 0 0 (for kinsoku)
あ	4 kern 1 12.1pt (from JFM)
	8 hlist 2(0.0+0.0)x0.0
	-----
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 い 63 (0.0+0.0)x10.0
い	3 penalty 0 0 (for kinsoku)
	8 hlist 2(0.0+0.0)x0.0
	-----
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 う 63 (0.0+0.0)x10.0
う	5 kern 1 -14.1pt (from 'lineend' in JFM)
	3 penalty 0 0 (for kinsoku)
	4 glue 0 31.40001pt (from JFM)
	8 hlist 2(0.0+0.0)x0.0
	-----
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 え 63 (0.0+0.0)x10.0
え	3 penalty 0 0 (for kinsoku)
	4 kern 1 17.3pt (from JFM)
	8 hlist 2(0.0+0.0)x0.0
	-----
	F glue 0 9.4pt plus 2.3pt minus 4.5pt
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 63 (0.0+0.0)x10.0
あ ア	4 kern 1 12.1pt (from JFM)
	8 hlist 2(8.8+1.2)x10.0
	.2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ア 63 (0.0+0.0)x10.0
	-----
	F glue 0 9.4pt plus 2.3pt minus 4.5pt
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 63 (0.0+0.0)x10.0
あ a	4 kern 1 12.1pt (from JFM)
	8 hlist 2(5.2002+0.03906)x5.49805
	.8 glyph 256 a 62 (5.2002+0.03906)x5.49805
	-----
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 い 63 (0.0+0.0)x10.0
い a	7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
	8 hlist 2(5.2002+0.03906)x5.49805
	.8 glyph 256 a 62 (5.2002+0.03906)x5.49805

### hbox-JA (pen なし)

	8 hlist 2(0.0+0.0)x0.0
	3 penalty 0 0 (for kinsoku)
	2 hlist 0(8.8+1.2)x10.0 (packed)
あ	.8 glyph 256 あ 63 (0.0+0.0)x10.0
	8 hlist 2(0.0+0.0)x0.0
	3 penalty 0 0 (for kinsoku)
	4 glue 0 14.1pt (from JFM)
	2 hlist 0(8.8+1.2)x10.0 (packed)
い	.8 glyph 256 い 63 (0.0+0.0)x10.0
	8 hlist 2(0.0+0.0)x0.0
	3 penalty 0 0 (for kinsoku)
	4 kern 1 20.0pt (from JFM)
	2 hlist 0(8.8+1.2)x10.0 (packed)
う	.8 glyph 256 う 63 (0.0+0.0)x10.0

JA-JA (pen あり)

	F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 4 kern 1 20.0pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ア 63 (0.0+0.0)x10.0
あ ア	----- F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 123 (for kinsoku) 6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 イ 63 (0.0+0.0)x10.0
あい	----- F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 123 (for kinsoku) 4 glue 0 28.20001pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ウ 63 (0.0+0.0)x10.0
あ ウ	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 4 kern 1 20.0pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ア 63 (0.0+0.0)x10.0
い ア	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 3 penalty 0 123 (for kinsoku) 6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 イ 63 (0.0+0.0)x10.0
いイ	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 3 penalty 0 123 (for kinsoku) 4 glue 0 14.1pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ウ 63 (0.0+0.0)x10.0
い ウ	----- .8 glyph 256 ウ 63 (0.0+0.0)x10.0

JA-EN (pen あり)

	F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 4 kern 1 12.1pt (from JFM) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
あ a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0 3 penalty 0 123 (for kinsoku) 7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
い a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 う 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 123 (for kinsoku) 4 glue 0 31.40001pt (from JFM) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
う a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 え 63 (0.0+0.0)x10.0 4 kern 1 17.3pt (from JFM) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
え a	----- 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 お 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 123 (for kinsoku) 7 glue 0 16.50554pt plus 1.0pt minus 1.0pt (xkanjiskip) 8 glyph 256 a 62 (5.2002+0.03906)x5.49805
お a	----- 8 glyph 256 a 62 (5.2002+0.03906)x5.49805

EN-JA (pen あり)

	8 glyph 256 a 62 (5.2002+0.03906)x5.49805 3 penalty 0 321 (for kinsoku) 7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0
a あ	----- 8 glyph 256 a 62 (5.2002+0.03906)x5.49805 3 penalty 0 892 (for kinsoku) 4 glue 0 14.1pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 い 63 (0.0+0.0)x10.0
a い	----- 8 glyph 256 a 62 (5.2002+0.03906)x5.49805 3 penalty 0 321 (for kinsoku) 4 kern 1 20.0pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 う 63 (0.0+0.0)x10.0
a う	----- .8 glyph 256 う 63 (0.0+0.0)x10.0

JA-hbox (pen あり)

```
F glue 0 9.4pt plus 2.3pt minus 4.5pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
4 kern 1 12.1pt (from JFM)
8 hlist 2(8.8+1.2)x10.0
あ ア
-----
F glue 0 9.4pt plus 2.3pt minus 4.5pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
4 kern 1 12.1pt (from JFM)
8 hlist 2(5.2002+0.03906)x5.49805
あ a
-----
.8 glyph 256 a 62 (5.2002+0.03906)x5.49805
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ゐ 63 (0.0+0.0)x10.0
3 penalty 0 123 (for kinsoku)
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 hlist 2(5.2002+0.03906)x5.49805
い a
-----
.8 glyph 256 a 62 (5.2002+0.03906)x5.49805
8 hlist 2(8.8+1.2)x10.0
.2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ( 63 (0.0+0.0)x10.0
3 penalty 0 571 (for kinsoku)
4 glue 0 14.1pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ゐ 63 (0.0+0.0)x10.0
3 penalty 0 123 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
8 hlist 2(8.8+1.2)x10.0
( い)
-----
.2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ) 63 (0.0+0.0)x10.0
-----
italic correction
8 glyph 256 f 37 (6.94444+1.94444)x3.06665
9 kern 1 2.11945pt (italic correction)
3 penalty 0 123 (for kinsoku)
4 glue 0 5.0pt minus 5.0pt (from JFM)
2 hlist 0(8.8+1.2)x5.0 (packed)
.0 kern 0 -0.09766pt
.8 glyph 256 ( 60 (8.32031+0.71777)x5.09766
9 kern 1 0.0pt (italic correction)
3 penalty 0 10000 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
f (あ)
-----
.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
.0 kern 0 1.00098pt
-----
```

[x]kanjiskip の挿入

kanjiskip from JFM, autospacing (JA-JA)

	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
	.0 kern 0 1.00098pt
	6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
ああ	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 63 (0.0+0.0)x10.0
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
	.0 kern 0 1.00098pt
	6 glue 0 0.0pt (kanjiskip)
ああ	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 63 (0.0+0.0)x10.0
	2 hlist 0(10.56+1.44)x12.0 (packed)
	.8 glyph 256 は 66 (0.0+0.0)x12.0
	6 glue 0 0.0pt (kanjiskip)
はあ	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 63 (0.0+0.0)x10.0
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
	.0 kern 0 1.00098pt
	6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
	.0 kern 0 1.00098pt
	6 glue 0 0.0pt (kanjiskip)
あああ	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
	.0 kern 0 1.00098pt

kanjiskip from JFM/autospacing (JA-EN)

	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
ま x	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
ま x	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	7 glue 0 0.0pt (xkanjiskip)
ま x	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	7 glue 0 3.1pt plus 0.45pt minus 0.57pt (xkanjiskip)
ま x	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	7 glue 0 0.0pt (xkanjiskip)
ま x	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	7 glue 0 0.0pt (xkanjiskip)
ま x	8 glyph 256 x 62 (5.07813+0.0)x4.8877

xkanjiskip from JFM/autospacing (EN-JA)

	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	3 penalty 0 0 (for kinsoku)
	7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
x ま	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	3 penalty 0 0 (for kinsoku)
	7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
x ま	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	3 penalty 0 0 (for kinsoku)
	7 glue 0 0.0pt (xkanjiskip)
x ま	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	3 penalty 0 0 (for kinsoku)
	7 glue 0 3.1pt plus 0.45pt minus 0.57pt (xkanjiskip)
x ま	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0
	8 glyph 256 x 62 (5.07813+0.0)x4.8877
	3 penalty 0 0 (for kinsoku)
	7 glue 0 0.0pt (xkanjiskip)
x ま	2 hlist 0(8.8+1.2)x10.0 (packed)
	.8 glyph 256 ま 63 (0.0+0.0)x10.0

```

8 glyph 256 x 62 (5.07813+0.0)x4.8877
3 penalty 0 0 (for kinsoku)
7 glue 0 0.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ま 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 0 (for kinsoku)
7 glue 0 14.1pt (xkanjiskip)
8 glyph 256 x 62 (5.07813+0.0)x4.8877

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xまおx

more than one penalty

```

2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 l1 63 (0.0+0.0)x10.0

```

---

おい

```

2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 63 (0.0+0.0)x10.0

```

---

おお

```

F glue 0 9.4pt plus 2.3pt minus 4.5pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 l1 63 (0.0+0.0)x10.0

```

---

あい

```

F glue 0 9.4pt plus 2.3pt minus 4.5pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 63 (0.0+0.0)x10.0

```

---

あお

その他: italic correction and accents

```

2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
.0 kern 0 1.00098pt
9 kern 1 0.0pt (italic correction)
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 glyph 256 j 1 (6.67859+1.94444)x3.05557

```

---

あ j

```

2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 れ 63 (0.0+0.0)x10.0
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 kern 2 1.25pt (for accent)
8 hlist 0(6.28473+0.0)x5.00002, shifted -2.52777
.0 glyph 0 ` 1 (6.28473+0.0)x5.00002
8 kern 2 -6.25002pt (for accent)
8 glyph 256 A 1 (6.83331+0.0)x7.50002
3 penalty 0 10000 (for kinsoku)
7 glue 0 0.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ) 63 (0.0+0.0)x10.0

```

---

れ Ä )

その他: box boundary

```

F glue 0 10.3pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 か 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 0 (for kinsoku)
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 か 63 (0.0+0.0)x10.0
F kern 1 8.5pt

```

---

かあか

```

8 glyph 256 a 62 (5.2002+0.03906)x5.49805
3 penalty 0 0 (for kinsoku)
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 か 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 0 (for kinsoku)
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 か 63 (0.0+0.0)x10.0
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
-----
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
8 hlist 2(8.8+1.2)x28.8
.F glue 0 10.3pt
.2 hlist 0(8.8+1.2)x10.0 (packed)
..8 glyph 256 か 63 (0.0+0.0)x10.0
.F kern 1 8.5pt
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
-----
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 き 63 (0.0+0.0)x10.0
3 penalty 0 0 (for kinsoku)
8 hlist 2(8.8+1.2)x28.8
.F glue 0 10.3pt
.2 hlist 0(8.8+1.2)x10.0 (packed)
..8 glyph 256 か 63 (0.0+0.0)x10.0
.F kern 1 8.5pt
3 penalty 0 0 (for kinsoku)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 き 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
8 hlist 2(8.8+1.2)x10.0
.2 hlist 0(8.8+1.2)x10.0 (packed)
..8 glyph 256 き 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 き 63 (0.0+0.0)x10.0
-----
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
.0 kern 0 1.00098pt
3 penalty 0 1000 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
8 hlist 2(8.8+1.2)x5.0
.2 hlist 0(8.8+1.2)x5.0 (packed)
..0 kern 0 -0.09766pt
..8 glyph 256 ( 60 (8.32031+0.71777)x5.09766
3 penalty 0 1000 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
.0 kern 0 1.00098pt
3 penalty 0 1000 (for kinsoku)
4 glue 0 5.0pt minus 5.0pt (from JFM)
2 hlist 0(8.8+1.2)x5.0 (packed)
.0 kern 0 -0.09766pt
.8 glyph 256 ( 60 (8.32031+0.71777)x5.09766
3 penalty 0 10000 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 60 (8.11035+0.36133)x8.99902
.0 kern 0 1.00098pt
-----

```

あ(あ)あ

か(か)か

き(き)き

あ(あ)あ



paragraph, hbox and math boundary

		0 whatsit 6 subtype: 66
		0 hlist 3(0.0+0.0)x19.2
		F glue 0 6.8pt plus 0.2pt minus 0.4pt
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 か 63 (0.0+0.0)x10.0
		3 penalty 0 500 (for kinsoku)
		6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 I 63 (0.0+0.0)x10.0
		8 penalty 0 10000
		0 glue 15 30.0pt
		0 glue 9 0.0pt
か	工	<hr/>
		0 whatsit 6 subtype: 66
		F glue 0 10.3pt
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 か 63 (0.0+0.0)x10.0
		3 penalty 0 500 (for kinsoku)
		6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 I 63 (0.0+0.0)x10.0
		8 penalty 0 10000
		0 glue 15 30.0pt
		0 glue 9 0.0pt
か	工	<hr/>
		F glue 0 10.3pt
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 か 63 (0.0+0.0)x10.0
		6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 I 63 (0.0+0.0)x10.0
か工		<hr/>
		F glue 0 7.8pt
		F glue 0 9.4pt plus 2.3pt minus 4.5pt
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 あ 63 (0.0+0.0)x10.0
		5 kern 1 -14.1pt (from 'lineend' in JFM)
		3 penalty 0 0 (for kinsoku)
		4 glue 0 26.6pt plus 4.3pt minus 8.7pt (from JFM)
		0 math 0
		8 glyph 256 a 7 (4.30554+0.0)x5.28589
		8 math 1
		3 penalty 0 0 (for kinsoku)
		4 glue 0 6.8pt plus 0.2pt minus 0.4pt (from JFM)
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 さ 63 (0.0+0.0)x10.0
		7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
		0 math 0
		8 glyph 256 a 7 (4.30554+0.0)x5.28589
		8 math 1
		3 penalty 0 0 (for kinsoku)
		7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
		2 hlist 0(8.8+1.2)x10.0 (packed)
		.8 glyph 256 か 63 (0.0+0.0)x10.0
あ a さ a か		<hr/>
		F kern 1 8.5pt