Essays in Theoretical Microeconomics and Empirical Macroecoconomics with Implications for Social Policy All around the World

Inauguraldissertation

zur Erlangung des Grades eines Doktors
der Wirtschaftswissenschaften

durch

die Rechts- und Staatswissenschaftliche Fakultät der
Rheinischen Friedrich-Wilhelms-Universität Bonn

vorgelegt von

U. R. Béta Zane-Ål

aus Summacumlaudeville

2021

Dekan:	Prof. Dr. Jürgen von Hagen
Erstreferent:	Prof. Dr. Armin Falk
Zweitreferent:	Prof. Dr. Hans-Martin von Gaudecker
Tag der mündlichen Prüfung:	1. April 2021

Acknowledgements

I blame all of you. Writing this book has been an exercise in sustained suffering. The casual reader may, perhaps, exempt herself from excessive guilt, but for those of you who have played the larger role in prolonging my agonies with your encouragement and support, well … you know who you are, and you owe me.

—Brendan Pietsch, assistant professor of religious studies at Nazarbayev University in Astana, Kazakhstan

Source: https://www.timeshighereducation.com/blog/best-academic-acknowledgements-ever

Commenting is on!
To switch it off, activate `\PassOptionsToPackage{final}{changes}` in the master file.

Regarding the formal requirements for submitting your dissertation to the Department of Economics of the University of Bonn, please see

- https://www.rsf.uni-bonn.de/dekanat/Formulare.

In particular, please consult

- https://www.rsf.uni-bonn.de/dekanat/Formulare/promotionsordnung-wiwi-vom-25.-april-2005 (§ 10 lists the documents that need to be handed in when submitting the dissertation) and
- https://www.rsf.uni-bonn.de/dekanat/Formulare/eidesstattliche-erklaerung.

The leaflet

- https://www.rsf.uni-bonn.de/dekanat/Formulare/vorgaben-pflichtexemplare-wiwi

describes the details to be included in the front matter of your dissertation and the details regarding the inclusion of the CV at the end of the document.

U. R. Béta Zane-Ål
Bonn, December 2020

Contents

List of Figures

List of Tables

Introduction

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain all letters of the alphabet and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. [1]

On November 14, 1885, Senator & Mrs. Leland Stanford called together at their San Francisco mansion the 24 prominent men who had been chosen as the first trustees of The Leland Stanford Junior University. They handed to the board the Founding Grant of the University, which they had executed three days before. This document—with various amendments, legislative acts, and court decrees—remains as the University’s charter. In bold, sweeping language it stipulates that the objectives of the University are “to qualify students for personal success and direct usefulness in life; and to promote the publick welfare by exercising an influence in behalf of humanity and civilization, teaching the blessings of liberty regulated by law, and inculcating love and reverence for the great principles of government as derived from the inalienable rights of man to life, liberty, and the pursuit of happiness.”

¿But aren’t Kafka’s Schloß and Æsop’s Œuvres often naïve vis-à-vis the dæmonic phœnix’s official rôle in fluffy soufflés?

(¡THE DAZED BROWN FOX QUICKLY GAVE 12345–67890 JUMPS!)

Ångelå Beatrice Claire Diana Érica Françoise Ginette Hélène Iris Jackie Kāren Łauṙa María Nǻtaļie Øctave Pauline Quêneau Roxanne Sabine Tẵja Uršula Vivian Wendy Xanthippe Yvønne Zäzilie

Let us cite some publications: Andersen, Harrison, Lau, and Rutström (2008), Andreoni and Sprenger (2012), Kőszegi and Szeidl (2013), and Balakrishnan, Haushofer, and Jakiela (2016). With the options set for BibLaTeX in the preamble, citations in the body text are automatically sorted chronologically—irrespective of

1. A test footnote.

Table 1. Characters Contained in the Serif Font: XCharter-TLF

	´0	´1	´2	´3	´4	´5	´6	´7	
´00x	` 0	´ 1	ˆ 2	˜ 3	¨ 4	˝ 5	˚ 6	ˇ 7	″0x
´01x	˘ 8	¯ 9	˙ 10	¸ 11	˛ 12	‚ 13	‹ 14	› 15	
´02x	“ 16	” 17	„ 18	« 19	» 20	– 21	— 22	23	″1x
´03x	o 24	ı 25	ȷ 26	ffl 27	ffi 28	ff 29	fl 30	fi 31	
´04x	␣ 32	! 33	" 34	# 35	$ 36	% 37	& 38	’ 39	″2x
´05x	(40	) 41	* 42	+ 43	, 44	- 45	. 46	/ 47	
´06x	0 48	1 49	2 50	3 51	4 52	5 53	6 54	7 55	″3x
´07x	8 56	9 57	: 58	; 59	< 60	= 61	> 62	? 63	
´10x	@ 64	A 65	B 66	C 67	D 68	E 69	F 70	G 71	″4x
´11x	H 72	I 73	J 74	K 75	L 76	M 77	N 78	O 79	
´12x	P 80	Q 81	R 82	S 83	T 84	U 85	V 86	W 87	″5x
´13x	X 88	Y 89	Z 90	[91	\ 92	] 93	^ 94	_ 95	
´14x	‘ 96	a 97	b 98	c 99	d 100	e 101	f 102	g 103	″6x
´15x	h 104	i 105	j 106	k 107	l 108	m 109	n 110	o 111	
´16x	p 112	q 113	r 114	s 115	t 116	u 117	v 118	w 119	″7x
´17x	x 120	y 121	z 122	{ 123	| 124	} 125	~ 126	- 127	
´20x	Ă 128	Ą 129	Ć 130	Č 131	Ď 132	Ě 133	Ę 134	Ğ 135	″8x
´21x	Ĺ 136	Ľ 137	Ł 138	Ń 139	Ň 140	Ŋ 141	Ő 142	Ŕ 143	
´22x	Ř 144	Ś 145	Š 146	Ş 147	Ť 148	Ţ 149	Ű 150	Ů 151	″9x
´23x	Ÿ 152	Ź 153	Ž 154	Ż 155	Ĳ 156	İ 157	đ 158	§ 159	
´24x	ă 160	ą 161	ć 162	č 163	ď 164	ě 165	ę 166	ğ 167	″Ax
´25x	ĺ 168	ľ 169	ł 170	ń 171	ň 172	ŋ 173	ő 174	ŕ 175	
´26x	ř 176	ś 177	š 178	ş 179	ť 180	ţ 181	ű 182	ů 183	″Bx
´27x	ÿ 184	ź 185	ž 186	ż 187	ĳ 188	¡ 189	¿ 190	£ 191	
´30x	À 192	Á 193	Â 194	Ã 195	Ä 196	Å 197	Æ 198	Ç 199	″Cx
´31x	È 200	É 201	Ê 202	Ë 203	Ì 204	Í 205	Î 206	Ï 207	
´32x	Ð 208	Ñ 209	Ò 210	Ó 211	Ô 212	Õ 213	Ö 214	Œ 215	″Dx
´33x	Ø 216	Ù 217	Ú 218	Û 219	Ü 220	Ý 221	Þ 222	SS 223	
´34x	à 224	á 225	â 226	ã 227	ä 228	å 229	æ 230	ç 231	″Ex
´35x	è 232	é 233	ê 234	ë 235	ì 236	í 237	î 238	ï 239	
´36x	ð 240	ñ 241	ò 242	ó 243	ô 244	õ 245	ö 246	œ 247	″Fx
´37x	ø 248	ù 249	ú 250	û 251	ü 252	ý 253	þ 254	ß 255	
	″8	″9	″A	″B	″C	″D	″E	″F	

the order of the “citekeys” in your input. Of course, entries are sorted alphabetically by author surname in the list of references.

Table 2. Characters Contained in the Sans-Serif Font: FiraSans-TLF

	´0	´1	´2	´3	´4	´5	´6	´7	
´00x	` 0	´ 1	ˆ 2	˜ 3	¨ 4	˝ 5	˚ 6	ˇ 7	˝0x
´01x	˘ 8	¯ 9	˙ 10	¸ 11	˛ 12	‚ 13	‹ 14	› 15	
´02x	“ 16	” 17	„ 18	« 19	» 20	– 21	— 22	23	˝1x
´03x	ﬀ 24	ı 25	ȷ 26	ﬃ 27	ﬁ 28	ﬂ 29	ﬄ 30	fj 31	
´04x	32	! 33	" 34	# 35	$ 36	% 37	& 38	’ 39	˝2x
´05x	(40	) 41	* 42	+ 43	, 44	- 45	. 46	/ 47	
´06x	0 48	1 49	2 50	3 51	4 52	5 53	6 54	7 55	˝3x
´07x	8 56	9 57	: 58	; 59	< 60	= 61	> 62	? 63	
´10x	@ 64	A 65	B 66	C 67	D 68	E 69	F 70	G 71	˝4x
´11x	H 72	I 73	J 74	K 75	L 76	M 77	N 78	O 79	
´12x	P 80	Q 81	R 82	S 83	T 84	U 85	V 86	W 87	˝5x
´13x	X 88	Y 89	Z 90	[91	\ 92	] 93	^ 94	_ 95	
´14x	‘ 96	a 97	b 98	c 99	d 100	e 101	f 102	g 103	˝6x
´15x	h 104	i 105	j 106	k 107	l 108	m 109	n 110	o 111	
´16x	p 112	q 113	r 114	s 115	t 116	u 117	v 118	w 119	˝7x
´17x	x 120	y 121	z 122	{ 123	| 124	} 125	~ 126	- 127	
´20x	Ă 128	Ą 129	Ć 130	Č 131	Ď 132	Ě 133	Ę 134	Ğ 135	˝8x
´21x	Ĺ 136	Ľ 137	Ł 138	Ń 139	Ň 140	Ŋ 141	Ő 142	Ŕ 143	
´22x	Ř 144	Ś 145	Š 146	Ş 147	Ť 148	Ţ 149	Ű 150	Ů 151	˝9x
´23x	Ÿ 152	Ź 153	Ž 154	Ż 155	Ĳ 156	İ 157	đ 158	§ 159	
´24x	ă 160	ą 161	ć 162	č 163	ď 164	ě 165	ę 166	ğ 167	˝Ax
´25x	ĺ 168	ľ 169	ł 170	ń 171	ň 172	ŋ 173	ő 174	ŕ 175	
´26x	ř 176	ś 177	š 178	ş 179	ť 180	ţ 181	ű 182	ů 183	˝Bx
´27x	ÿ 184	ź 185	ž 186	ż 187	ĳ 188	¡ 189	¿ 190	£ 191	
´30x	À 192	Á 193	Â 194	Ã 195	Ä 196	Å 197	Æ 198	Ç 199	˝Cx
´31x	È 200	É 201	Ê 202	Ë 203	Ì 204	Í 205	Î 206	Ï 207	
´32x	Ð 208	Ñ 209	Ò 210	Ó 211	Ô 212	Õ 213	Ö 214	Œ 215	˝Dx
´33x	Ø 216	Ù 217	Ú 218	Û 219	Ü 220	Ý 221	Þ 222	SS 223	
´34x	à 224	á 225	â 226	ã 227	ä 228	å 229	æ 230	ç 231	˝Ex
´35x	è 232	é 233	ê 234	ë 235	ì 236	í 237	î 238	ï 239	
´36x	ð 240	ñ 241	ò 242	ó 243	ô 244	õ 245	ö 246	œ 247	˝Fx
´37x	ø 248	ù 249	ú 250	û 251	ü 252	ý 253	þ 254	ß 255	
	˝8	˝9	˝A	˝B	˝C	˝D	˝E	˝F	

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will

get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain all letters of the alphabet and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

References

Andersen, Steffen, Glenn W. Harrison, Morten I. Lau, and E. Elisabet Rutström. 2008. “Eliciting Risk and Time Preferences.” *Econometrica* 76 (3): 583–618. DOI: 10.1111/j.1468-0262.2008.00848.x. [1]

Andreoni, James, and Charles Sprenger. 2012. “Estimating Time Preferences from Convex Budgets.” *American Economic Review* 102 (7): 3333–56. DOI: 10.1257/aer.102.7.3333. [1]

Balakrishnan, Uttara, Johannes Haushofer, and Pamela Jakiela. 2016. “How Soon Is Now? Evidence of Present Bias from Convex Time Budget Experiments.” IZA Discussion Paper. URL: http://ftp.iza.org/dp9653.pdf. [1]

Kőszegi, Botond, and Adam Szeidl. 2013. “A Model of Focusing in Economic Choice.” *Quarterly Journal of Economics* 128 (1): 53–104. DOI: 10.1093/qje/qjs049. [1]

Chapter 1

My Job Market Paper*

1.1 Introduction

> *"Most people can save a few dollars a day or even $10 a day," she said. "That's doable. But if you say, 'Can you save $300 a month or a couple of thousand dollars a year?' people will say, 'Whoa.' Avoiding that 'whoa,' which is the hesitancy that can derail planning, is what consultants like Ms. Davidson are trying to do."*
>
> —*New York Times*, March 27, 2016

This template uses the Charter typeface for the body text. Charter is a serif typeface and was designed in 1987 by Matthew Carter. By contrast, all headings, tables, and captions are set in a sans-serif typeface. The sans-serif typeface used in this document is Fira Sans, designed by Erik Spiekermann and collaborators.

The math settings are adjusted in the preamble to the effect that mathematical formulas are automatically typeset in the same font as the surrounding text. That is, math in a serif environment will be set in a serif font, while math in a sans-serif environment will use the sans-serif font. This is an aesthetic choice that may not please everyone given that a sans-serif font may be used in mathematical formulas to express a particular meaning. These cases are, however, very rare.

Let us cite some publications: Andersen, Harrison, Lau, and Rutström (2008), Andreoni and Sprenger (2012), Kőszegi and Szeidl (2013), and Balakrishnan, Haushofer, and Jakiela (2016). Andersen et al. (2008) once more. With the options set for BibLaTeX in the preamble, citations in the body text are automatically sorted chronologically—irrespective of the order of the "citekeys" in your input. Entries are sorted alphabetically by author surname in the list of references.

This is the second paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text,

* This footnote can be used for acknowledgments. This is where you can express your gratitude to referees, editors, and colleagues for their valuable feedback and suggestions that helped improve your manuscript. Financial support by third parties can also be mentioned here.

you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

[Holger 1]
Added text.

[U. R. 1]
Check whether there are more recent publications!

Some more references: See Sims (2003) and Gabaix (2014) for models of "rational inattention" or "goal-driven attention." See Bordalo, Gennaioli, and Shleifer (2012, 2013), Kőszegi and Szeidl (2013), Taubinsky (2014), and Bushong, Rabin, and Schwartzstein (2016) for models of "stimulus-driven attention."

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

This is the second paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

In Section 1.2, we describe the design of our study. We present the data analysis and our results in Section 1.3. In Section 1.4, we discuss the plausibility of potential alternative explanations. Section 1.5 concludes.

[Lou E. 1]

[Holger 2]
Removed: "in detail"

[Lou E. 2]
Replaced: "will conclude"

1.2 Methods

In this section, we first present the design of the experiment (1.2.1) and derive behavioral predictions (1.2.2).

1.2.1 Design of the Main Experiment

1.2.1.1 General Features

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

1.2.1.2 More Specific Features

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Let's test the euro symbol: €, €1,234.56, €1,234.56. Let's also test text superscripts: i^{th} and text subscripts: CO_2 and H_2O. $\sigma_\epsilon, c^\alpha$. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. Let's test the footnote settings.[1]

Figure 1.3 shows an exemplary decision screen with $B = €11$ and $r \approx 15\%$ for both $\text{BAL}^{\text{I}}_{1:1}$ (upper panel) and $\text{UNBAL}^{\text{I}}_{1:8}$ (lower panel). Through a slider, subjects choose their preferred $x \in \boldsymbol{X}$.[2] The slider position in Figure 1.3 indicates $x = 0.5$, i.e., the earliest payment is reduced by €5.50. Since $r \approx 15\%$ in this example, this slider position amounts to €6.30 that are paid at later payment dates. While these €6.30 are paid in a single bank transfer on the latest payment date in $\text{BAL}^{\text{I}}_{1:1}$, the amount is dispersed in equal parts over the last 8 payment dates in $\text{UNBAL}^{\text{I}}_{1:8}$—i.e., 8 consecutive payments of €0.79.[3]

1.2.1.3 Some More Details

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A

1. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

2. The slider had no initial position—it appeared only after subjects first positioned the mouse cursor over the slider bar. This was done to avoid default effects.

3. We always rounded the second decimal place up so that the sum of the payments included in a dispersed payoff was always at least as great as the respective concentrated payoff.

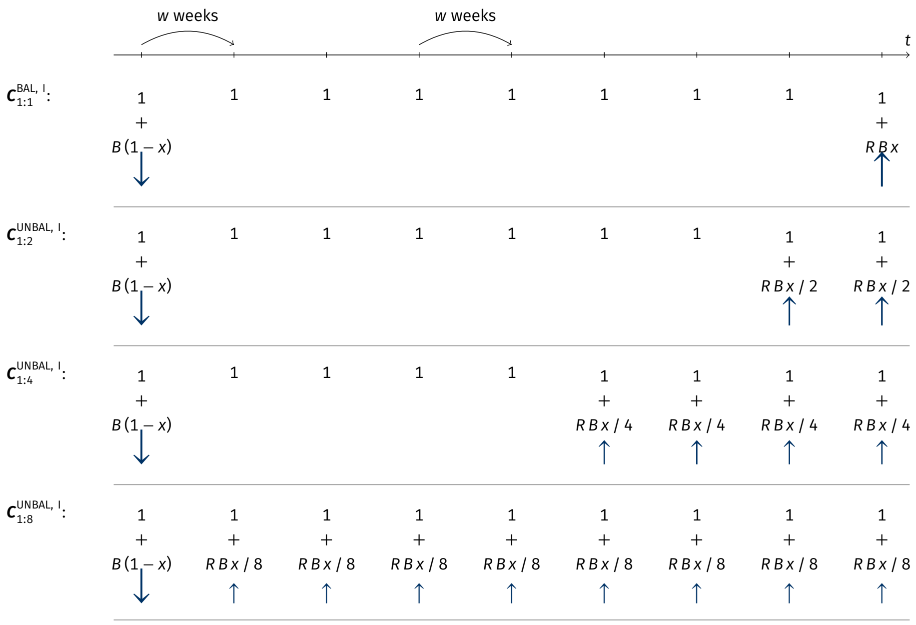


Figure 1.1. Budget Sets $\boldsymbol{C}_{1:1}^{\text{BAL, I}}$ and $\boldsymbol{C}_{1:n}^{\text{UNBAL, I}}$

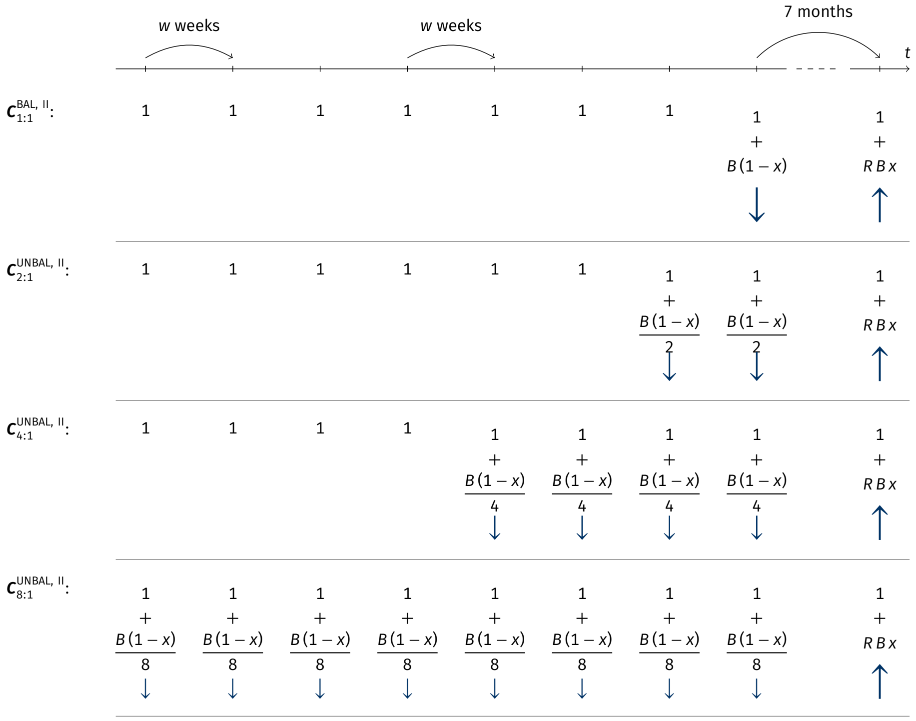
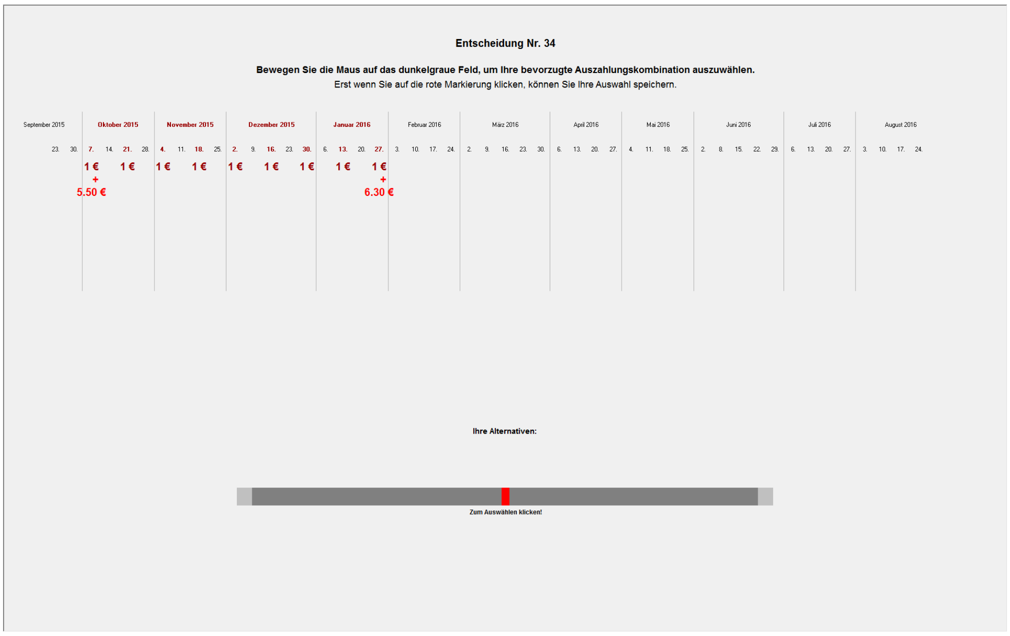


Figure 1.2. Budget Sets $\boldsymbol{C}_{1:1}^{\text{BAL, II}}$ and $\boldsymbol{C}_{n:1}^{\text{UNBAL, II}}$

Notes: For the values of B, R, and w that we used, see Section 1.2.1.4. The savings rate x is individuals' choice variable: they choose some $x \in \boldsymbol{X} = \{0, {}^1/_{100}, {}^2/_{100}, \ldots, 1\}$ in each trial. The arrows indicate whether and in which direction payments at the respective payment dates change if x is increased. σ_ε, c^α. This figure was taken from Dertwinkel-Kalt, Gerhardt, Riener, Schwerter, and Strang (2017).



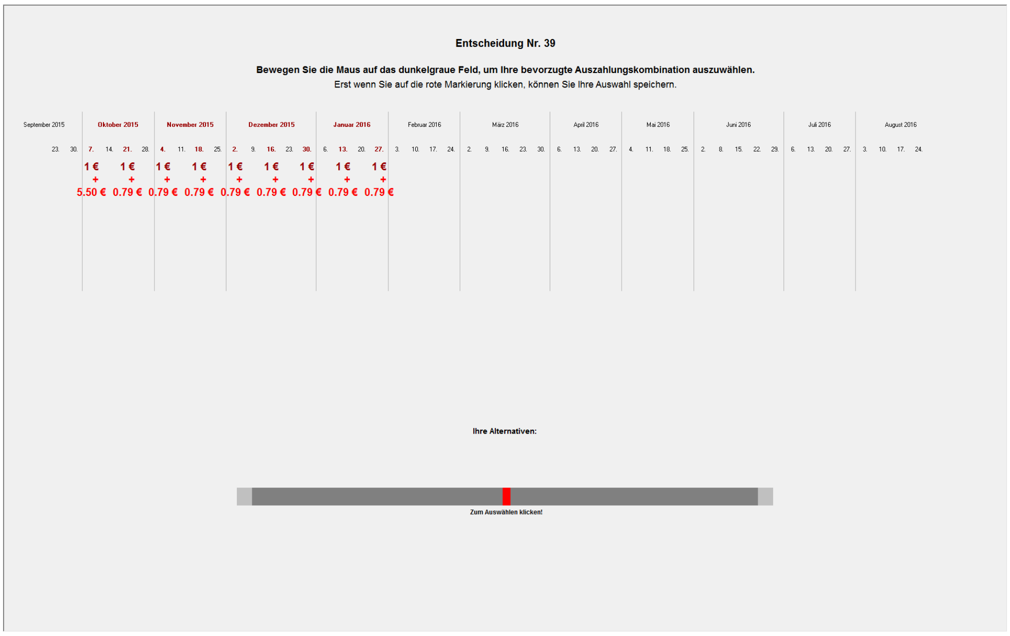


Figure 1.3. Screenshots of a $\mathrm{BAL}^{l}_{1:1}$ Decision (Top) and an $\mathrm{UNBAL}^{l}_{1:8}$ Decision (Bottom)

Note: This figure was taken from Dertwinkel-Kalt et al. (2017).

blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Here's a bulleted list:

- Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.
- Hello, here is some text without a meaning. $\mathrm{d}\Omega = \sin\vartheta \mathrm{d}\vartheta \mathrm{d}\varphi$. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sin^2(\alpha) + \cos^2(\beta) = 1$. This text should contain *all letters of the alphabet* and it should be written in of the original language $E = mc^2$. There is no need for special contents, but the length of words should match the language. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$.
- Hello, here is some text without a meaning. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. This text should show what a printed text will look like at this place. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. If you read this text, you will get no information. $\mathrm{d}\Omega = \sin\vartheta \mathrm{d}\vartheta \mathrm{d}\varphi$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. $\sin^2(\alpha) + \cos^2(\beta) = 1$.

1.2.1.4 Procedure

Describe the sequence of events in your study. You could do this with the help of an enumerated list:

(1) Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text

should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

(2) Hello, here is some text without a meaning. $\mathrm{d}\Omega = \sin\vartheta \mathrm{d}\vartheta \mathrm{d}\varphi$. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sin^2(\alpha) + \cos^2(\beta) = 1$. This text should contain *all letters of the alphabet* and it should be written in of the original language $E = mc^2$. There is no need for special contents, but the length of words should match the language. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$.

(3) Hello, here is some text without a meaning. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. This text should show what a printed text will look like at this place. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. If you read this text, you will get no information. $\mathrm{d}\Omega = \sin\vartheta \mathrm{d}\vartheta \mathrm{d}\varphi$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. $\sin^2(\alpha) + \cos^2(\beta) = 1$.

1.2.2 Predictions

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages.[4] Let's include a really, really long footnote to check how it is split across two

4. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all!

pages. Let’s include a really, really long footnote to check how it is split across two pages. Let’s include a really, really long footnote to check how it is split across two pages. Let’s include a really, really long footnote to check how it is split across two pages. Let’s include a really, really long footnote to check how it is split across two pages. Let’s include a really, really long footnote to check how it is split across two pages. Let’s include a really, really long footnote to check how it is split across two pages. Let’s include a really, really long footnote to check how it is split across two

---

A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

pages. Let's include a really, really long footnote to check how it is split across two pages.

By discounted utility we understand any intertemporal utility function that (1) is time-separable and that (2) values a payment farther in the future at most as much as an equal-sized payment closer in the future. Importantly, the predictions derived below hold for all three frequently used types of discounting—exponential, hyperbolic, and quasi-hyperbolic.

In the following, we assume that individuals base their decisions on utility derived from receiving monetary payments c_t at various dates t. This is an assumption that is frequently made in experiments on intertemporal decision making. One way to justify this assumption is that individuals anticipate to consume the payments they receive within a short period around date t. Given that the maximum payment was below €20 and that any two payment dates were separated by at least two weeks, this assumption seems reasonable (see the arguments in favor of this view in Halevy, 2014). Kőszegi and Szeidl (2013) themselves make the same assumption of "money in the utility function": "in some applications we also assume that monetary transactions induce direct utility consequences, so that for instance an agent making a payment experiences an immediate utility loss. The idea that people experience monetary transactions as immediate utility is both intuitively compelling and supported in the literature: ... some evidence on individuals' attitudes toward money, such as narrow bracketing (...) and laboratory evidence on hyperbolic discounting (...), is difficult to explain without it." Last but not least, the papers by McClure, Laibson, Loewenstein, and Cohen (2004) and McClure, Ericson, Laibson, Loewenstein, and Cohen (2007) demonstrate that brain activation, as measured by functional magnetic resonance imaging, is similar for primary and monetary rewards. Additionally, we make the standard assumption that utility from money is increasing in its argument but not convex: $u'(c_t) \geq 0$ and $u''(c_t) \leq 0$.

1.2.2.1 Discounted Utility

Individuals make their allocation decisions by comparing the aggregated consumption utility of each earnings sequence $\boldsymbol{c} \in \boldsymbol{C}$. Discounted utility assumes that the utility of each period enters overall utility additively. That is, utility derived from the payment to be received at future date t can be expressed as $u_t(c_t) := D(t)\,u(c_t)$. Here, $D(t)$ denotes the individual's discount function for conversion of future utility into present utility. The discount function satisfies $0 \leq D(t)$ and $D'(t) \leq 0$, such that a payment further in the future is valued at most as much as an equal-sized payment closer in the future.[5]

5. Normalization such that $D(t) \leq 1$ is not necessary in our case. Provided that t is a metric time measure, where $t = 0$ stands for the present, examples are $D(t) := \delta^t$ with some $\delta > 0$ for exponential discounting and $D(t) := (1 + \alpha t)^{-\gamma/\alpha}$ with some $\alpha, \gamma > 0$ for generalized hyperbolic discounting.

The utility of earnings sequence $\boldsymbol{c}$ with payments c_t in periods $t = 1, \ldots, T$ is

$$U(\boldsymbol{c}) \;=\; \sum_{t=1}^{T} u_t(c_t) \;=\; \sum_{t=1}^{T} D(t)\, u(c_t). \tag{1.1}$$

Individuals choose how much to allocate to the different periods by maximizing their utility over all possible earnings sequences available within a given budget set $\boldsymbol{C}$, see equation (1.1). We use the superscript $^{\mathrm{DU}}$ to indicate decisions based on discounted utility.

A Subparagraph. After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Another Subparagraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

1.2.2.2 Focus-Weighted Utility

In this section, we extend the model of discounted utility through "focus weights," as proposed by Kőszegi and Szeidl (2013). Period-t weights g_t scale period-t consumption utility u_t. Individuals are assumed to maximize focus-weighted utility, which is defined as follows:

$$\tilde{U}(\boldsymbol{c}, \boldsymbol{C}) \;:=\; \sum_{t=1}^{T} g_t(\boldsymbol{C})\, u_t(c_t). \tag{1.2}$$

In contrast to discounted utility $U(\boldsymbol{c})$, focus-weighted utility $\tilde{U}(\boldsymbol{c}, \boldsymbol{C})$ has two arguments: the earnings sequence $\boldsymbol{c}$ and the choice set $\boldsymbol{C}$. The latter dependence is due to the weights g_t. These are given by a strictly increasing weighting function g that takes as its argument the difference between the maximum and the minimum attainable utility in period t over all possible earnings sequences in set $\boldsymbol{C}$:

$$g_t(\boldsymbol{C}) \;:=\; g[\Delta_t(\boldsymbol{C})] \quad \text{with} \quad \Delta_t(\boldsymbol{C}) \;:=\; \max_{\boldsymbol{c}\in\boldsymbol{C}} u_t(c_t) - \min_{\boldsymbol{c}\in\boldsymbol{C}} u_t(c_t). \tag{1.3}$$

If the underlying consumption utility function is characterized by discounted utility, then $u_t(c_t) := D(t)\, u(c_t)$. That is, focused thinkers put more weight on period t than on period t' if the discounted-utility distance between the best and worst alternative is larger for period t than for period t'.

A Subparagraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Yet Another Subparagraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

1.2.2.3 Hypotheses

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all* *letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. This gives rise to our first hypothesis:

Hypothesis 1.1. *This environment can be used to clearly state your hypothesis and set them apart from the body text.*

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. Based on this, we can state our second hypothesis:

Hypothesis 1.2. *This environment can be used to clearly state your hypothesis and set them apart from the body text.*

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

1.3 Results

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. With this, we can test our hypotheses.

Table 1.1. An Example Table

Dependent variable	$\hat{d}$
Estimate	0.123***
	(0.011)
Observations	750
Subjects	250

Notes: Standard errors in parentheses, clustered on the subject level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

1.3.1 Test of Hypothesis 1.1

Our first result supports Hypothesis 1.1. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. The analysis we conducted to obtain Result 1.1 is described in detail in Table 1.1. Let's reference a section, a subsection, and a figure from the appendices: Section 1.C, Section 1.A.2, Figure 1.B.1.

Result 1.1. *Hello, here is some text without a meaning. This text should show what a printed text will look like at this place.* $\sin^2(\alpha) + \cos^2(\beta) = 1$. *If you read this text, you will get no information* $E = mc^2$. *Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text* like this *gives you information about the selected font, how the letters are written and an impression of the look.* $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. *This text should contain* all letters of the alphabet *and it should be written in of the original language.* $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. *There is no need for special contents, but the length of words should match the language.* $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$.

There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

1.3.2 Test of Hypothesis 1.2

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. We thereby test Hypothesis 1.2.

Result 1.2. *Hello, here is some text without a meaning. This text should show what a printed text will look like at this place.* $\sin^2(\alpha) + \cos^2(\beta) = 1$. *If you read this text, you will get no information* $E = mc^2$. *Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text* like this *gives you information about the selected font, how the letters are written and an impression of the look.* $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. *This text should contain* all letters of the alphabet *and it should be written in of the original language.* $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. *There is no need for special contents, but the length of words should match the language.* $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Our second result provides evidence in support of Hypothesis 1.2. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

1.3.3 Heterogeneity

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$.

There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{i=n} x_i = \frac{x_1 + x_2 + \ldots + x_n}{n}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\int_0^\infty e^{-\alpha x^2} \mathrm{d}x = \frac{1}{2}\sqrt{\int_{-\infty}^\infty e^{-\alpha x^2} \mathrm{d}x \int_{-\infty}^\infty e^{-\alpha y^2} \mathrm{d}y} = \frac{1}{2}\sqrt{\frac{\pi}{\alpha}}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\sum_{k=0}^\infty a_0 q^k = \lim_{n\to\infty}\sum_{k=0}^n a_0 q^k = \lim_{n\to\infty} a_0 \frac{1-q^{n+1}}{1-q} = \frac{a_0}{1-q}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-p \pm \sqrt{p^2 - 4q}}{2}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\frac{\partial^2 \Phi}{\partial x^2} + \frac{\partial^2 \Phi}{\partial y^2} + \frac{\partial^2 \Phi}{\partial z^2} = \frac{1}{c^2}\frac{\partial^2 \Phi}{\partial t^2}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

1.3.4 Structural Estimation

Inspect the variance–covariance matrix $\boldsymbol{\Sigma}$:

$$\boldsymbol{\Sigma} := \mathrm{Cov}(\boldsymbol{X}) = \begin{bmatrix} \mathrm{Var}(X_1) & \cdots & \mathrm{Cov}(X_1, X_n) \\ \vdots & \ddots & \vdots \\ \mathrm{Cov}(X_n, X_1) & \cdots & \mathrm{Var}(X_n) \end{bmatrix}.$$

1.4 Discussion

1.4.1 Some Limitations

Let’s reference some tables: Table 1.2 and Table 1.3. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

Table 1.2. Points Awarded in Our Typeface Competition—Basic Formatting

	Utopia	Computer Modern	Charter	Times Roman	Palatino
Yoël	1	1	2	0	1
Çelik	2	0	2	1	0
Anità	1	2	1	2	0
Uğur	1	2	0	1	0
Håkan	1	0	2	0	1
Allison	2	0	1	2	1
Pía	1	0	2	1	0
David	1	0	2	1	1
Sum	10	5	12	8	4

1.4.2 Utility from Money

In deriving our predictions (Section 1.2.2), we assume that subjects base their decisions on utility derived from receiving monetary payments c_t at various dates t. We also make the standard assumption that utility from money is increasing in its argument but not convex, i.e., $u'(c_t) \geq 0$ and $u''(c_t) \leq 0$. Both assumptions are frequently made in studies on intertemporal decision making.

One way to justify the assumption of utility being based on money—rather than consumption—is that individuals anticipate to consume the payments that they receive at date t within a short period around t. Given that the maximum payment was

Table 1.3. Points Awarded in Our Typeface Competition—More Sophisticated Formatting

	Utopia[a]	Computer Modern[b]	Charter[c]	Times Roman[d]	Palatino[e]
Yoël	1	1	2	0	1
Çelik	2	0	2	1	0
Anità	1	2	1	2	0
Uğur	1	2	0	1	0
Håkan	1	0	2	0	1
Allison	2	0	1	2	1
Pía	1	0	2	1	0
David	1	0	2	1	1
Sum	10	5	12	8	4

[a] `\usepackage{fourier}`
[b] The LaTeX standard serif font.
[c] `\usepackage[charter]{mathdesign}`
[d] `\usepackage{newtxtext, newtxmath}`
[e] `\usepackage[sc]{mathpazo}`

below €20 and that any two payment dates were separated by at least two weeks, this seems reasonable (see the arguments in favor of this view in Halevy, 2014).

A second justification is consistency within the discipline: Halevy (2014) points out that "in the domain of risk and uncertainty … preferences are often defined over payments." In line with this, Kőszegi and Szeidl (2013, p. 62) make the same assumption of "money in the utility function":

> in some applications we also assume that monetary transactions induce *direct* utility consequences, so that for instance an agent making a payment experiences an immediate utility loss. The idea that people experience monetary transactions as immediate utility is both intuitively compelling and supported in the literature: … some evidence on individuals' attitudes toward money, such as narrow bracketing (…) and laboratory evidence on hyperbolic discounting (…), is difficult to explain without it.

Last but not least, the papers by McClure, Laibson, et al. (2004) and McClure, Ericson, et al. (2007) demonstrate that brain activation, as measured by functional magnetic resonance imaging, is similar for primary and monetary rewards.

Let us now discuss the second assumption: that utility from money is nonconvex. We find that subjects allocate more money to the concentrated payoffs in the unbalanced than in the associated balanced budget sets—which we call concentration bias. One might argue that this relative preference for concentrated payoffs can be explained by the per-period utility function over money being convex.

Obtaining evidence on the shape of utility over money is nontrivial because it requires that at least two monetary amounts be compared with each other without the one clearly dominating the other. Thus, estimates of the curvature of the utility function over money can be obtained in two ways: the monetary amounts must be paid in different states of the world, i.e., comprise a lottery, or they have to be paid at different points in time.[6] Both methods entail particular theoretical assumptions.

Andersen et al. (2008) advocate the former approach and argue that when estimating time preference parameters, one should control for the curvature of the utility function through a measure of the curvature that is based on observed choices under risk. Their study and numerous other studies on risk attitudes consistently reveal that the vast majority of subjects is risk-averse even over small stakes. Hence, for the vast majority of subjects, utility over money is concave according to this methodology (ruling out probability weighting). Others, most notably Andreoni and Sprenger (2012), have argued that the degree of curvature measured via risky choices probably overstates the degree of curvature effective in intertemporal choices, but they

6. As a matter of fact, the latter was the motivation behind Samuelson (1937): "Under the following four assumptions, it is believed possible to arrive theoretically at a precise measure of the marginal utility of *money income* …" (p. 155; emphasis in the original).

also find that utility is concave (albeit close to linear). Given this unambiguous evidence from previous studies, it is implausible that our subjects exhibit convex utility over money.

1.5 Conclusion

Cite some more papers (Yaari, 1965; Warner and Pleeter, 2001; Davidoff, Brown, and Diamond, 2005; Benartzi, Previtero, and Thaler, 2011). Let's cite a book: Luce (1959). Let's cite a contribution to a collected volume: Harrison and Rutström (2008) and a collection (an edited volume) itself: Kagel and Roth (2016). Now let's cite presentations at conferences: Vosgerau, Bruyneel, Dhar, and Wertenbroch (2008) and Beute and Kort (2012). Attema, Bleichrodt, Gao, Huang, and Wakker (2016) propose a method for "measuring discounting without measuring utility"[7].

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

Appendix 1.A Put More Complicated Derivations and Proofs Here

1.A.1 Appendix Subsection

This is the second paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

(1) Erster Listenpunkt, Stufe 1

7. The basic idea of their method is intriguingly simple: Imagine an individual who is indifferent between, say, Option A: \$10 today and Option B: \$10 in one year plus \$10 in two years. With a constant annual discount factor δ, this indifference translates to $u(\$10) = \delta\, u(\$10) + \delta^2\, u(\$10)$, so that $u(\$10)$ cancels out, and δ can be readily calculated as the solution to $1 = \delta + \delta^2$.

   a. Erster Listenpunkt, Stufe 2
      i. Erster Listenpunkt, Stufe 3
      ii. Zweiter Listenpunkt, Stufe 3
      iii. Dritter Listenpunkt, Stufe 3
      iv. Vierter Listenpunkt, Stufe 3
   b. Zweiter Listenpunkt, Stufe 2
   c. Dritter Listenpunkt, Stufe 2
   d. Vierter Listenpunkt, Stufe 2
(2) Zweiter Listenpunkt, Stufe 1
(3) Dritter Listenpunkt, Stufe 1
(4) Vierter Listenpunkt, Stufe 1

The typeset math below follows the ISO recommendations that only variables be set in italic. Note the use of upright shapes for "d," "e," and "π." (These are entered as `\mathup{d}`, `\mathup{e}`, and `\mathup{\pi}`, respectively.)

Theorem 1.1 (Simplest form of the *Central Limit Theorem*). *Let $X_1, X_2, \ldots, X_n$ be a sequence of i.i.d. random variables with mean 0 and variance 1 on a probability space $(\Omega, \mathscr{F}, \mathbb{P})$. Then*

$$\mathbb{P}\left(\frac{X_1 + \cdots + X_n}{\sqrt{n}} \le y\right) \to \mathfrak{N}(y) := \int_{-\infty}^{y} \frac{\mathrm{e}^{-v^2/2}}{\sqrt{2\pi}}\,\mathrm{d}v \quad \text{as } n \to \infty,$$

or, equivalently, letting $S_n := \sum_1^n X_k$,

$$\mathbb{E} f(S_n/\sqrt{n}) \to \int_{-\infty}^{\infty} f(v)\frac{\mathrm{e}^{-v^2/2}}{\sqrt{2\pi}}\,\mathrm{d}v \quad \text{as } n \to \infty, \text{ for every } f \in \mathrm{b}\mathscr{C}(\mathbb{R}).$$

1.A.2 Salience

Salience theory (Bordalo, Gennaioli, and Shleifer, 2012, 2013) represents a behavioral model according to which the most distinctive features of the available alternatives receive a particularly large share of attention and are therefore over-weighted. More precisely, a particular attribute out of all attributes of an alternative becomes the more salient, the more it differs from that attribute's average level over all available alternatives.

Formally, alternatives are assumed to be uniquely characterized by the values they take in $T \ge 1$ attributes (or, "dimensions"). Utility is assumed to be additively separable in attributes, and salience attaches a decision weight to each attribute of each good which indicates how salient the respective attribute is for that good. Suppose an agent chooses one alternative from some finite choice set $\boldsymbol{C}$. Let t index the T different attributes, and let k index the K available alternatives. Let $u_t(\cdot)$ denote the function which assigns utility to values in dimension t. Denote by a_t^k the level of attribute t of good k and define $u_t^k := u_t(a_t^k)$ as the utility that dimension t of good k yields. Let $\overline{u}_t$ be the average utility level, across all K goods, of dimension t. The salience of each dimension of good k is determined by a symmetric and continuous salience function $\sigma(\cdot,\cdot)$ that satisfies the following two properties:

(1) *Ordering.* Let $\mu := \text{sgn}(u_t^k - \overline{u}_t)$. Then for any $\epsilon, \epsilon' \geq 0$ with $\epsilon + \epsilon' > 0$, it holds that

$$\sigma(u_t^k + \mu\epsilon, \overline{u}_t - \mu\epsilon') \; > \; \sigma(u_t^k, \overline{u}_t). \tag{1.A.1}$$

(2) *Diminishing sensitivity.* For any $u_t^k, \overline{u}_t \geq 0$ and all $\epsilon > 0$, it holds that

$$\sigma(u_t^k + \epsilon, \overline{u}_t + \epsilon) \; < \; \sigma(u_t^k, \overline{u}_t). \tag{1.A.2}$$

Following the smooth salience characterization proposed in Bordalo, Gennaioli, and Shleifer (2012, p. 1255), each dimension t of good k receives weight $\Delta^{-\sigma(u_t^k, \overline{u}_t)}$, where $\Delta \in (0,1]$ is a constant that captures an agent's susceptibility to salience. $\Delta = 1$ gives rise to a rational decision maker, and the smaller Δ, the stronger is the salience bias. We call an agent with $\Delta < 1$ a salient thinker.

A reference with a large number of authors is Henrich, Boyd, Bowles, Camerer, Fehr, et al. (2005).

Appendix 1.B Some Additional Figures

	t								
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(1)$:	$1 + B$	1	1	1	1	1	1	1	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(2)$:	1	$1 + B + i$	1	1	1	1	1	1	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(3)$:	1	1	$1 + B + 2i$	1	1	1	1	1	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(4)$:	1	1	1	$1 + B + 3i$	1	1	1	1	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(5)$:	1	1	1	1	$1 + B + 4i$	1	1	1	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(6)$:	1	1	1	1	1	$1 + B + 5i$	1	1	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(7)$:	1	1	1	1	1	1	$1 + B + 6i$	1	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(8)$:	1	1	1	1	1	1	1	$1 + B + 7i$	1
$\boldsymbol{c}_{\mathrm{CL}}^{\mathrm{BAL}}(9)$:	1	1	1	1	1	1	1	1	$1 + B + 8i$

Figure 1.B.1. Earnings Sequences Included in Choice List $\boldsymbol{C}_{\mathrm{CL}}^{\mathrm{BAL}}$

Notes: For the values of B, i, and w that we used see Section 1.2. Figure taken from Dertwinkel-Kalt et al. (2017).

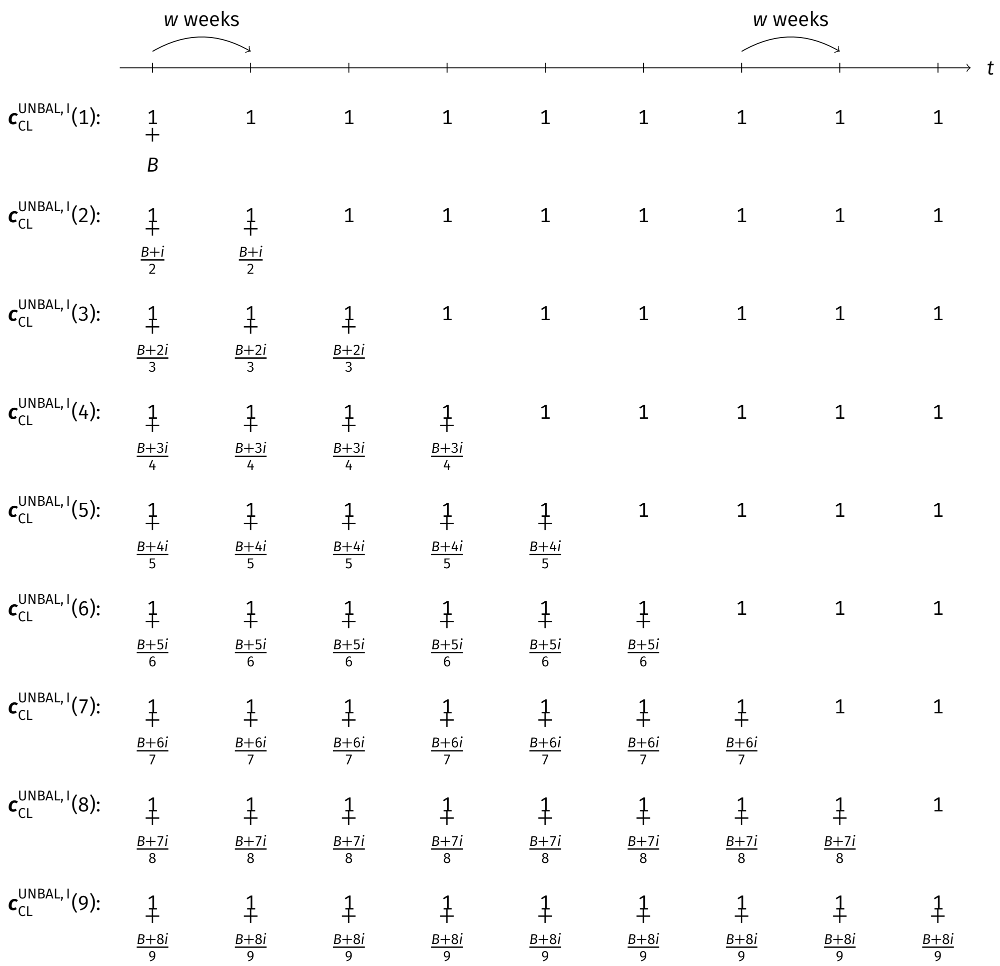


Figure 1.B.2. Earnings Sequences Included in Choice List $\boldsymbol{C}_{\text{CL}}^{\text{UNBAL, I}}$

Notes: For the values of B, i, and w that we used see Section 1.2. Figure taken from Dertwinkel-Kalt et al. (2017).

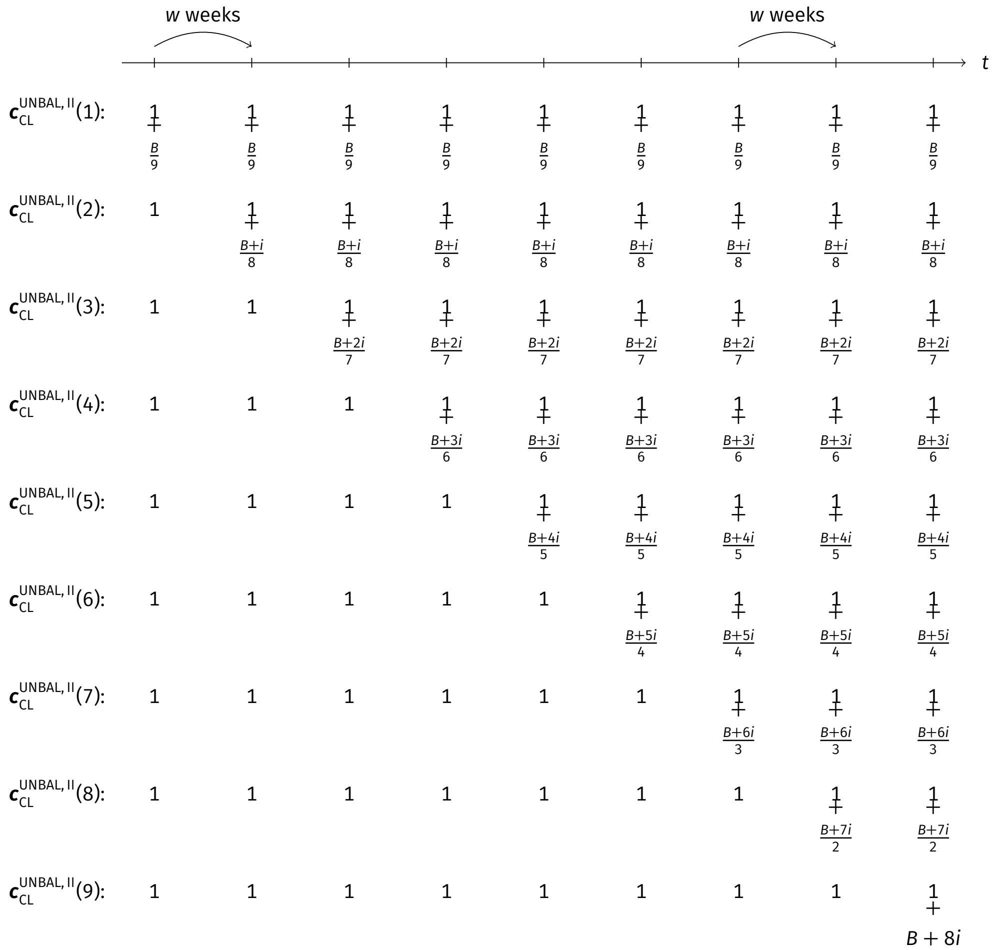


Figure 1.B.3. Earnings Sequences Included in Choice List $\boldsymbol{C}_{\mathrm{CL}}^{\mathrm{UNBAL,II}}$

Notes: For the values of B, i, and w that we used see Section 1.2. Figure taken from Dertwinkel-Kalt et al. (2017).

Appendix 1.C `siunitx` Example Tables

Table 1.C.1. An Example of a Regression Table (Adapted from Gerhardt, Schildberg-Hörisch, and Willrodt, 2017). Never Forget to Mention the Dependent Variable!

	(1)	(2)	(3)	(4)	(5)
Treatment	−0.390	−0.228	−0.729*	−0.449*	−0.453**
	(+0.352)	(−0.205)	[+0.377]	[−0.245]	{+0.204}
Female	0.948***	0.061	0.188	0.305	0.385*
	(0.354)	(0.233)	(0.372)	(0.226)	(0.222)
Female × Treatment	0.169	0.251	0.892*	0.454	0.439
	(0.514)	(0.325)	(0.533)	(0.341)	(0.307)
Final high school grade	−0.101	0.013	0.076	0.117	0.039
	(0.198)	(0.144)	(0.224)	(0.146)	(0.133)
Trait self-control	−0.016	0.002	−0.016	−0.000	−0.007
	(0.016)	(0.010)	(0.015)	(0.010)	(0.009)
Constant	2.357***	1.512***	−0.322	2.158***	1.437***
	(0.239)	(0.144)	(0.265)	(0.161)	(0.152)
Observations	303	289	295	304	1191
R^2	0.057	0.008	0.039	0.043	0.024
Treatment × (1 + Female)	−0.221	0.023	0.163	0.004	−0.014
p_F[Treatment × (1 + Female) = 0]	0.327	0.008	0.192	0.000	0.003

Notes: Dependent variable: $m_{\sim}$. Robust standard errors (cluster-corrected for column 5) in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Missing observations ($N < 308$) due to exclusion of trials in which subjects behaved irrationally (i.e., chose a dominated option). The regressors Final high school grade and Trait self-control are mean-centered.

Table 1.C.2. Figure Grouping via `siunitx` in a Table.

(1)	(2)	(3)
−0.100*	−0.100 01*	−123 456.444***
(2.871)	(2.871 23)	[+50 000.123]

Table 1.C.3. Overview of the Choice Lists Presented to Subjects (Adapted from Gerhardt, Schildberg-Hörisch, and Willrodt, 2017).

	Alternative ***A***				Alternative ***B***			
	$c_{\boldsymbol{A},1}$	$p_{\boldsymbol{A},1}$	$c_{\boldsymbol{A},2}$	$p_{\boldsymbol{A},2}$	$c_{\boldsymbol{B},1}$	$p_{\boldsymbol{B},1}$	$c_{\boldsymbol{B},2}$	$p_{\boldsymbol{B},2}$
Choice List I: risky/risky (x = €22.00, r = €7.50, k = €11.50; 25 rows)								
Top row	€ 3.00	50%	€22.00	50%	€ 3.00	50%	€ 7.00	50%
Center row	€ 3.00	50%	€22.00	50%	€ 9.00	50%	€13.00	50%
Row with $m = 0$	€ 3.00	50%	€22.00	50%	€10.50	50%	€14.50	50%
Bottom row	€ 3.00	50%	€22.00	50%	€15.00	50%	€19.00	50%
Choice List II: safe/risky (x = €16.00, r = €5.00, k = €5.00; 19 rows)								
Top row	€11.00	100%			€11.00	50%	€21.00	50%
Center row	€11.00	100%			€ 6.50	50%	€16.50	50%
Row with $m = 0$	€11.00	100%			€ 6.00	50%	€16.00	50%
Bottom row	€11.00	100%			€ 2.00	50%	€12.00	50%
Choice List III: "long shot" (x = €14.00, r = −€36.00, k = €7.00; 21 rows)								
Top row	€ 7.00	90%	€50.00	10%	€ 7.00	90%	€10.00	10%
Row with $m = 0$	€ 7.00	90%	€50.00	10%	€11.00	90%	€14.00	10%
Center row	€ 7.00	90%	€50.00	10%	€12.00	90%	€15.00	10%
Bottom row	€ 7.00	90%	€50.00	10%	€17.00	90%	€20.00	10%
Choice List IV: delayed payoffs (x = €18.00, r = €6.00, k = €8.50, paid in one week; 20 rows)								
Top row	€ 9.50	50%	€12.00	50%	€ 9.50	50%	€24.00	50%
Above-center row	€ 9.50	50%	€12.00	50%	€ 5.00	50%	€19.50	50%
Below-center row	€ 9.50	50%	€12.00	50%	€ 4.50	50%	€19.00	50%
Row with $m = 0$	€ 9.50	50%	€12.00	50%	€ 3.50	50%	€18.00	50%
Bottom row	€ 9.50	50%	€12.00	50%	€ 0.00	50%	€14.50	50%

References

Andersen, Steffen, Glenn W. Harrison, Morten I. Lau, and E. Elisabet Rutström. 2008. "Eliciting Risk and Time Preferences." *Econometrica* 76 (3): 583–618. DOI: 10.1111/j.1468-0262.2008.00848.x. [5, 23]

Andreoni, James, and Charles Sprenger. 2012. "Estimating Time Preferences from Convex Budgets." *American Economic Review* 102 (7): 3333–56. DOI: 10.1257/aer.102.7.3333. [5, 23]

Attema, Arthur E., Han Bleichrodt, Yu Gao, Zhenxing Huang, and Peter P. Wakker. 2016. "Measuring Discounting without Measuring Utility." *American Economic Review* 106 (6): 1476–94. DOI: 10.1257/aer.20150208. [24]

Balakrishnan, Uttara, Johannes Haushofer, and Pamela Jakiela. 2016. "How Soon Is Now? Evidence of Present Bias from Convex Time Budget Experiments." IZA Discussion Paper. URL: http://ftp.iza.org/dp9653.pdf. [5]

Benartzi, Shlomo, Alessandro Previtero, and Richard H. Thaler. 2011. "Annuitization Puzzles." *Journal of Economic Perspectives* 25 (4): 143–64. DOI: 10.1257/jep.25.4.143. [24]

Beute, Femke, and Yvonne A. W. de Kort. 2012. "Always Look on the Bright Side of Life: Ego-Replenishing Effects of Daylight versus Artificial Light." In *Proceedings of Experiencing Light 2012: International Conference on the Effects of Light on Wellbeing*. Edited by Y. A. W. de Kort, M. P. J. Aarts, F. Beute, A. Haans, W. A. IJsselsteijn, D. Lakens, K. C. H. J. Smolders, and L. van Rijswijk. Eindhoven University of Technology. Eindhoven, The Netherlands, 1–4. URL: http://2012.experiencinglight.nl/doc/41.pdf. [24]

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer. 2012. "Salience Theory of Choice Under Risk." *Quarterly Journal of Economics* 127 (3): 1243–85. DOI: 10.1093/qje/qjs018. [6, 25, 26]

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer. 2013. "Salience and Consumer Choice." *Journal of Political Economy* 121 (5): 803–43. DOI: 10.1086/673885. [6, 25]

Bushong, Benjamin, Matthew Rabin, and Joshua Schwartzstein. 2016. "A Model of Relative Thinking." Working paper. Cambridge, MA, USA: Harvard University. URL: http://people.hbs.edu/jschwartzstein/RelativeThinking.pdf. [6]

Davidoff, Thomas, Jeffrey R. Brown, and Peter A. Diamond. 2005. "Annuities and Individual Welfare." *American Economic Review* 95 (5): 1573–90. DOI: 10.1257/000282805775014281. [24]

Dertwinkel-Kalt, Markus, Holger Gerhardt, Gerhard Riener, Frederik Schwerter, and Louis Strang. 2017. "Concentration Bias in Intertemporal Choice." Working paper. Bonn, Germany, et al.: University of Bonn et al. URL: https://www.dropbox.com/s/dv20mcu0qkygmjz/Concentration_Bias_in_Intertemporal_Choice.pdf. [9, 10, 27–29]

Gabaix, Xavier. 2014. "A Sparsity-Based Model of Bounded Rationality." *Quarterly Journal of Economics* 129 (4): 1661–710. DOI: 10.1093/qje/qju024. [6]

Gerhardt, Holger, Hannah Schildberg-Hörisch, and Jana Willrodt. 2017. "Does self-control depletion affect risk attitudes?" *European Economic Review* 100 (November): 463–87. DOI: 10.1016/j.euroecorev.2017.09.004. [30, 31]

Halevy, Yoram. 2014. "Some Comments on the Use of Monetary and Primary Rewards in the Measurement of Time Preferences." Working paper. University of British Columbia. URL: http://faculty.arts.ubc.ca/yhalevy/monetary_primary.pdf. [14, 23]

Harrison, Glenn W., and E. Elisabet Rutström. 2008. "Risk Aversion in the Laboratory." In *Risk Aversion in Experiments*. Edited by Glenn W. Harrison and James C. Cox. Vol. 12, Research in Experimental Economics. Bingley, UK: Emerald Group. Chapter 1, 41–196. DOI: 10.1016/S0193-2306(08)00003-3. [24]

Henrich, Joseph, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, Richard McElreath, Michael Alvard, Abigail Barr, Jean Ensminger, Natalie Smith Henrich, Kim Hill, Francisco Gil-White, Michael Gurven, Frank W. Marlowe, John Q. Patton, and David Tracer. 2005. "'Economic man' in cross-cultural perspective: Behavioral experiments in 15 small-scale societies." *Behavioral and Brain Sciences* 28 (6): 795–815, discussion 815–55. DOI: 10.1017/S0140525X05000142. [26]

Kagel, John H., and Alvin E. Roth, editors. 2016. *The Handbook of Experimental Economics*. Vol. 2, Princeton, NJ, USA: Princeton University Press. [24]

Kőszegi, Botond, and Adam Szeidl. 2013. "A Model of Focusing in Economic Choice." *Quarterly Journal of Economics* 128 (1): 53–104. DOI: 10.1093/qje/qjs049. [5, 6, 14, 15, 23]

Luce, R. Duncan. 1959. *Individual Choice Behavior: A Theoretical Analysis*. New York, NY, USA: John Wiley & Sons. [24]

McClure, Samuel M., Keith M. Ericson, David Laibson, George Loewenstein, and Jonathan D. Cohen. 2007. "Time Discounting for Primary Rewards." *Journal of Neuroscience* 27 (21): 5796–804. DOI: 10.1523/JNEUROSCI.4246-06.2007. [14, 23]

McClure, Samuel M., David Laibson, George Loewenstein, and Jonathan D. Cohen. 2004. "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science* 306 (5695): 503–7. DOI: 10.1126/science.1100907. [14, 23]

Samuelson, Paul. 1937. "A Note on Measurement of Utility." *Review of Economic Studies* 4 (2): 155–61. DOI: 10.2307/2967612. [23]

Sims, Christopher A. 2003. "Implications of rational inattention." *Journal of Monetary Economics* 50 (3): 665–90. DOI: 10.1016/S0304-3932(03)00029-1. [6]

Sullivan, Paul. 2016. "Fresh Thinking on Saving." *New York Times* (New York edition), March 27, 2016: F2. URL: http://nytimes.com/2016/03/27/your-money/getting-workers-to-save-more-for-retirement.html. [5]

Taubinsky, Dmitry. 2014. "From Intentions to Actions: A Model and Experimental Evidence of Inattentive Choice." Working paper. Hanover, NH, USA: Dartmouth College. URL: https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxkbWl0cnlwYXBlcnN8Z3g6NmIzYWM0MWIwNTc4MjkwNQ. [6]

Vosgerau, Joachim, Sabrina Bruyneel, Ravi Dhar, and Klaus Wertenbroch. 2008. "Ego Depletion and Cognitive Load: Same or Different Constructs?" In *Advances in Consumer Research*. Vol. 35, Association for Consumer Research, 217–20. URL: http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=13549. [24]

Warner, John T., and Saul Pleeter. 2001. "The Personal Discount Rate: Evidence from Military Downsizing Programs." *American Economic Review* 91 (1): 33–53. DOI: 10.1257/aer.91.1.33. [24]

Yaari, Menahem E. 1965. "Uncertain Lifetime, Life Insurance, and the Theory of the Consumer." *Review of Economic Studies* 32 (2): 137–50. DOI: 10.2307/2296058. [24]

Chapter 2

My Second Paper Has a Long Title That Spans Two Lines*

Joint with Adam Smith, Janet Smith, and Jeremiah Smith

2.1 Introduction

> *"Most people can save a few dollars a day or even $10 a day," she said. "That's doable. But if you say, 'Can you save $300 a month or a couple of thousand dollars a year?' people will say, 'Whoa.' Avoiding that 'whoa,' which is the hesitancy that can derail planning, is what consultants like Ms. Davidson are trying to do."*
>
> —*New York Times*, March 27, 2016

This template uses the Charter typeface for the body text. Charter is a serif typeface and was designed in 1987 by Matthew Carter. By contrast, all headings, tables, and captions are set in a sans-serif typeface. The sans-serif typeface used in this document is Fira Sans, designed by Erik Spiekermann and collaborators.

The math settings are adjusted in the preamble to the effect that mathematical formulas are automatically typeset in the same font as the surrounding text. That is, math in a serif environment will be set in a serif font, while math in a sans-serif environment will use the sans-serif font. This is an aesthetic choice that may not please everyone given that a sans-serif font may be used in mathematical formulas to express a particular meaning. These cases are, however, very rare.

Let us cite some publications: Andersen, Harrison, Lau, and Rutström (2008), Andreoni and Sprenger (2012), Kőszegi and Szeidl (2013), and Balakrishnan, Haushofer, and Jakiela (2016). Andersen et al. (2008) once more. With the options set for BibLaTeX in the preamble, citations in the body text are automatically sorted

* This footnote can be used for acknowledgments. This is where you can express your gratitude to referees, editors, and colleagues for their valuable feedback and suggestions that helped improve your manuscript. Financial support by third parties can also be mentioned here.

chronologically—irrespective of the order of the "citekeys" in your input. Entries are sorted alphabetically by author surname in the list of references.

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

[Holger 3]
Added text.

[U. R. 2]
Check whether there are more recent publications!

Some more references: See Sims (2003) and Gabaix (2014) for models of "rational inattention" or "goal-driven attention." See Bordalo, Gennaioli, and Shleifer (2012, 2013), Kőszegi and Szeidl (2013), Taubinsky (2014), and Bushong, Rabin, and Schwartzstein (2016) for models of "stimulus-driven attention."

This is the second paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$.

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

In Section 2.2, we describe the design of our study. We present the data analysis and our results in Section 2.3. In Section 2.4, we discuss the plausibility of potential alternative explanations. Section 2.5 concludes.

[Lou E. 3]

[Holger 4]
Removed: "in detail"

[Lou E. 4]
Replaced: "will conclude"

2.2 Methods

In this section, we first present the design of the experiment (2.2.1) and derive behavioral predictions (2.2.2).

2.2.1 Design of the Main Experiment

2.2.1.1 General Features

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$.

There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

2.2.1.2 More Specific Features

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Let’s test the euro symbol: €, €1,234.56, €1,234.56. Let’s also test text superscripts: i^{th} and text subscripts: CO_2 and H_2O. $\sigma_\epsilon, c^\alpha$. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. Let’s test the footnote settings.[1]

Figure 2.3 shows an exemplary decision screen with $B = €11$ and $r \approx 15\%$ for both $\text{BAL}^{\text{I}}_{1:1}$ (upper panel) and $\text{UNBAL}^{\text{I}}_{1:8}$ (lower panel). Through a slider, subjects choose their preferred $x \in \boldsymbol{X}$.[2] The slider position in Figure 2.3 indicates $x = 0.5$, i.e., the earliest payment is reduced by €5.50. Since $r \approx 15\%$ in this example, this slider position amounts to €6.30 that are paid at later payment dates. While these €6.30 are paid in a single bank transfer on the latest payment date in $\text{BAL}^{\text{I}}_{1:1}$, the

1. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

2. The slider had no initial position—it appeared only after subjects first positioned the mouse cursor over the slider bar. This was done to avoid default effects.

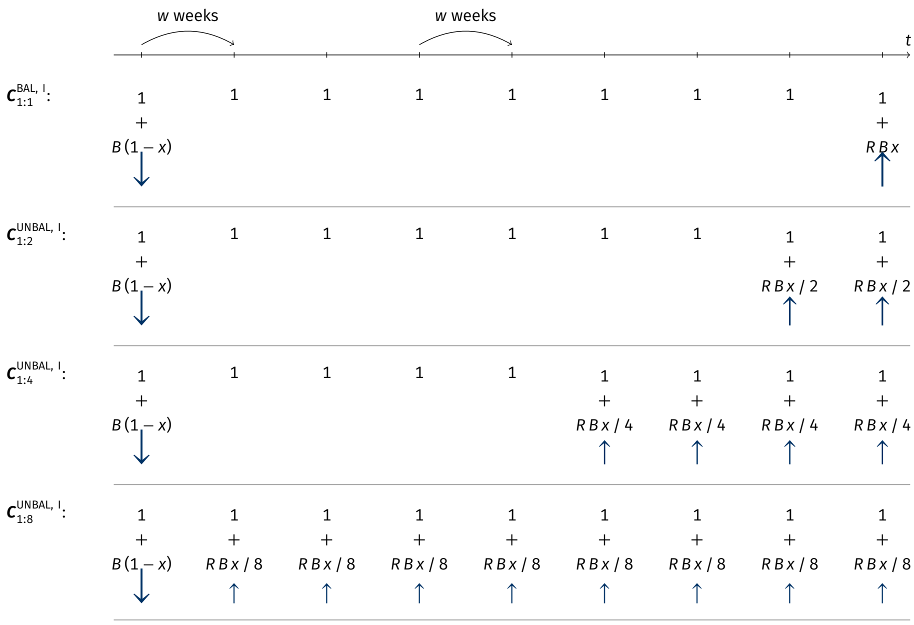


Figure 2.1. Budget Sets $C_{1:1}^{\text{BAL, I}}$ and $C_{1:n}^{\text{UNBAL, I}}$

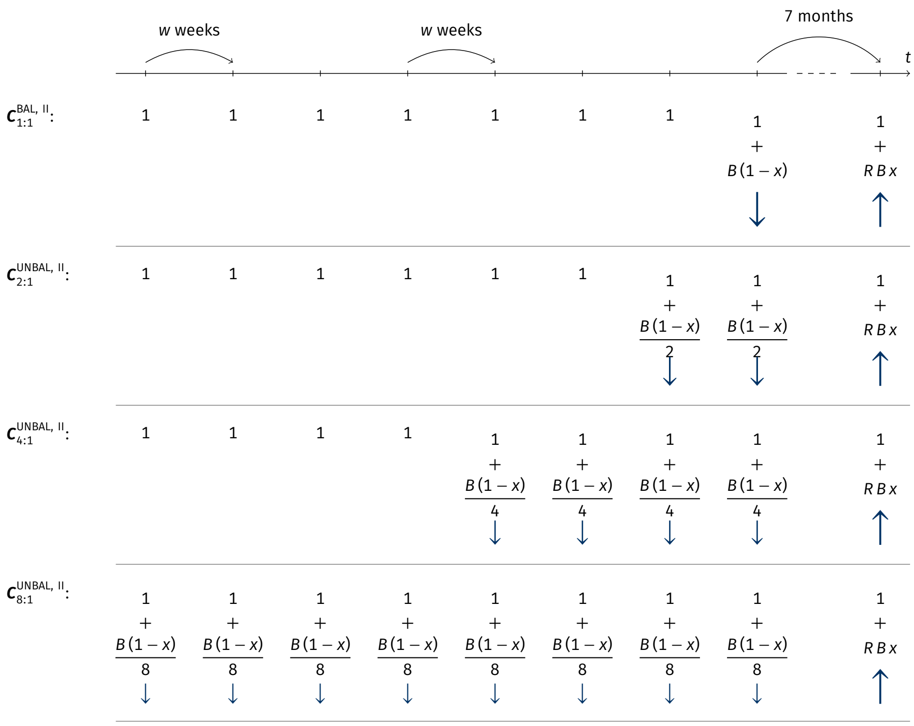
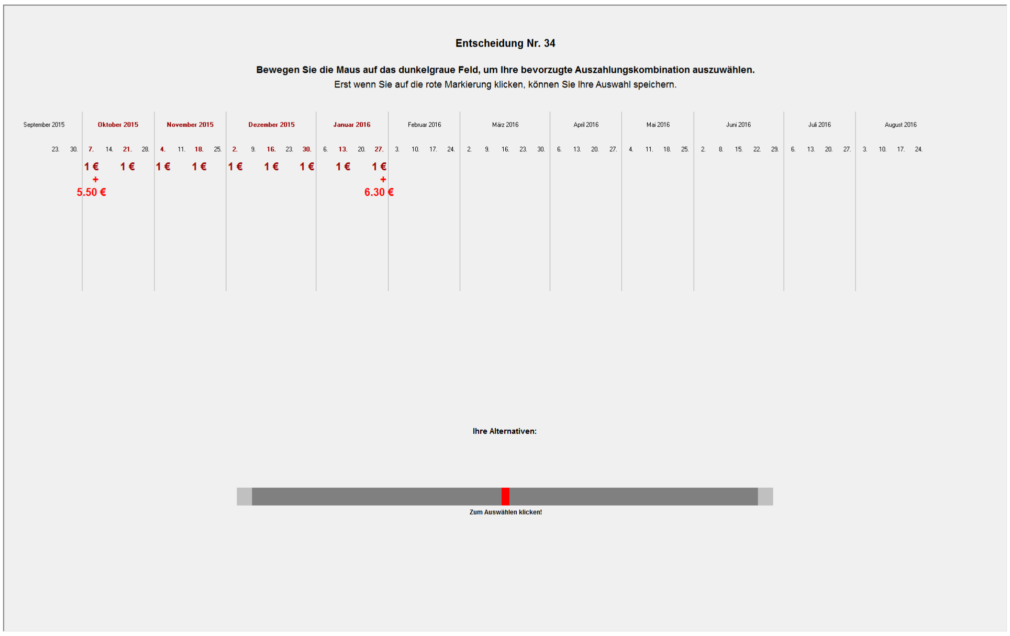


Figure 2.2. Budget Sets $C_{1:1}^{\text{BAL, II}}$ and $C_{n:1}^{\text{UNBAL, II}}$

Notes: For the values of B, R, and w that we used, see Section 2.2.1.4. The savings rate x is individuals' choice variable: they choose some $x \in \boldsymbol{X} = \{0, {}^1\!/_{100}, {}^2\!/_{100}, \dots, 1\}$ in each trial. The arrows indicate whether and in which direction payments at the respective payment dates change if x is increased. σ_ε, c^α. This figure was taken from Dertwinkel-Kalt, Gerhardt, Riener, Schwerter, and Strang (2017).



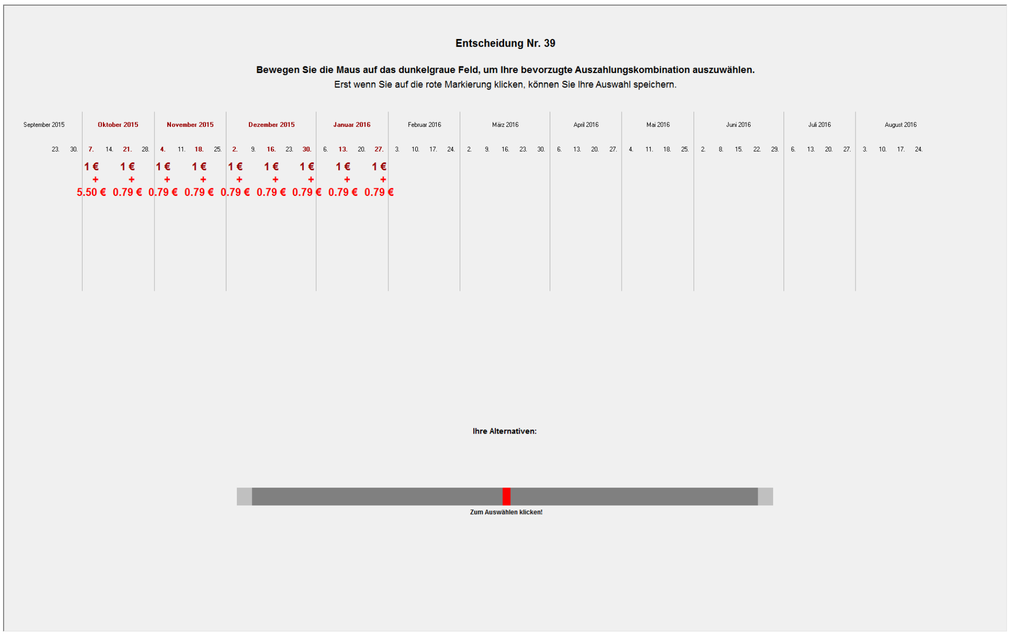


Figure 2.3. Screenshots of a $\text{BAL}^{\text{I}}_{1:1}$ Decision (Top) and an $\text{UNBAL}^{\text{I}}_{1:8}$ Decision (Bottom)

Note: This figure was taken from Dertwinkel-Kalt et al. (2017).

amount is dispersed in equal parts over the last 8 payment dates in $\text{UNBAL}^{\text{I}}_{1:8}$—i.e., 8 consecutive payments of €0.79.[3]

3. We always rounded the second decimal place up so that the sum of the payments included in a dispersed payoff was always at least as great as the respective concentrated payoff.

2.2.1.3 Some More Details

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$.

Here's a bulleted list:

- Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$.
- Hello, here is some text without a meaning. $d\Omega=\sin\vartheta d\vartheta d\varphi$. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sin^2(\alpha)+\cos^2(\beta)=1$. This text should contain *all letters of the alphabet* and it should be written in of the original language $E=mc^2$. There is no need for special contents, but the length of words should match the language. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$.
- Hello, here is some text without a meaning. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. This text should show what a printed text will look like at this place. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$. If you read this text, you will get no information. $d\Omega=\sin\vartheta d\vartheta d\varphi$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. $\sin^2(\alpha)+\cos^2(\beta)=1$.

2.2.1.4 Procedure

Describe the sequence of events in your study. You could do this with the help of an enumerated list:

(1) Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

(2) Hello, here is some text without a meaning. $d\Omega = \sin\vartheta d\vartheta d\varphi$. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sin^2(\alpha) + \cos^2(\beta) = 1$. This text should contain *all letters of the alphabet* and it should be written in of the original language $E = mc^2$. There is no need for special contents, but the length of words should match the language. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$.

(3) Hello, here is some text without a meaning. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. This text should show what a printed text will look like at this place. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. If you read this text, you will get no information. $d\Omega = \sin\vartheta d\vartheta d\varphi$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. $\sin^2(\alpha) + \cos^2(\beta) = 1$.

2.2.2 Predictions

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$.

There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages.[4] Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two

4. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in

pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages. Let's include a really, really long footnote to check how it is split across two pages.

By discounted utility we understand any intertemporal utility function that (1) is time-separable and that (2) values a payment farther in the future at most as much as an equal-sized payment closer in the future. Importantly, the predictions derived below hold for all three frequently used types of discounting—exponential, hyperbolic, and quasi-hyperbolic.

In the following, we assume that individuals base their decisions on utility derived from receiving monetary payments c_t at various dates t. This is an assumption that is frequently made in experiments on intertemporal decision making. One way to justify this assumption is that individuals anticipate to consume the payments they receive within a short period around date t. Given that the maximum payment was below €20 and that any two payment dates were separated by at least two weeks, this assumption seems reasonable (see the arguments in favor of this view in Halevy, 2014). Kőszegi and Szeidl (2013) themselves make the same assumption of "money in the utility function": "in some applications we also assume that monetary transactions induce direct utility consequences, so that for instance an agent making a payment experiences an immediate utility loss. The idea that people experience monetary transactions as immediate utility is both intuitively compelling and supported in the literature: … some evidence on individuals' attitudes toward money, such as narrow bracketing (…) and laboratory evidence on hyperbolic discounting (…), is difficult to explain without it." Last but not least, the papers by McClure, Laibson, Loewenstein, and Cohen (2004) and McClure, Ericson, Laibson, Loewenstein, and Cohen (2007) demonstrate that brain activation, as measured by functional magnetic resonance imaging, is similar for primary and monetary rewards. Additionally, we make the standard assumption that utility from money is increasing in its argument but not convex: $u'(c_t) \geq 0$ and $u''(c_t) \leq 0$.

2.2.2.1 Discounted Utility

Individuals make their allocation decisions by comparing the aggregated consumption utility of each earnings sequence $\boldsymbol{c} \in \boldsymbol{C}$. Discounted utility assumes that the utility of each period enters overall utility additively. That is, utility derived from

---

of the original language. There is no need for special contents, but the length of words should match the language.

the payment to be received at future date t can be expressed as $u_t(c_t) := D(t)\,u(c_t)$. Here, $D(t)$ denotes the individual's discount function for conversion of future utility into present utility. The discount function satisfies $0 \leq D(t)$ and $D'(t) \leq 0$, such that a payment further in the future is valued at most as much as an equal-sized payment closer in the future.[5]

The utility of earnings sequence $\boldsymbol{c}$ with payments c_t in periods $t = 1, \dots, T$ is

$$U(\boldsymbol{c}) \;=\; \sum_{t=1}^{T} u_t(c_t) \;=\; \sum_{t=1}^{T} D(t)\,u(c_t). \tag{2.1}$$

Individuals choose how much to allocate to the different periods by maximizing their utility over all possible earnings sequences available within a given budget set $\boldsymbol{C}$, see equation (2.1). We use the superscript $^{\mathrm{DU}}$ to indicate decisions based on discounted utility.

A Subparagraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

This is the second paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Another Subparagraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This

5. Normalization such that $D(t) \leq 1$ is not necessary in our case. Provided that t is a metric time measure, where $t = 0$ stands for the present, examples are $D(t) := \delta^t$ with some $\delta > 0$ for exponential discounting and $D(t) := (1 + \alpha\, t)^{-\gamma/\alpha}$ with some $\alpha, \gamma > 0$ for generalized hyperbolic discounting.

text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

2.2.2.2 Focus-Weighted Utility

In this section, we extend the model of discounted utility through "focus weights," as proposed by Kőszegi and Szeidl (2013). Period-t weights g_t scale period-t consumption utility u_t. Individuals are assumed to maximize focus-weighted utility, which is defined as follows:

$$\tilde{U}(\boldsymbol{c}, \boldsymbol{C}) \;:=\; \sum_{t=1}^{T} g_t(\boldsymbol{C})\, u_t(c_t). \tag{2.2}$$

In contrast to discounted utility $U(\boldsymbol{c})$, focus-weighted utility $\tilde{U}(\boldsymbol{c}, \boldsymbol{C})$ has two arguments: the earnings sequence $\boldsymbol{c}$ and the choice set $\boldsymbol{C}$. The latter dependence is due to the weights g_t. These are given by a strictly increasing weighting function g that takes as its argument the difference between the maximum and the minimum attainable utility in period t over all possible earnings sequences in set $\boldsymbol{C}$:

$$g_t(\boldsymbol{C}) \;:=\; g[\Delta_t(\boldsymbol{C})] \quad \text{with} \quad \Delta_t(\boldsymbol{C}) \;:=\; \max_{\boldsymbol{c}\in\boldsymbol{C}} u_t(c_t) - \min_{\boldsymbol{c}\in\boldsymbol{C}} u_t(c_t). \tag{2.3}$$

If the underlying consumption utility function is characterized by discounted utility, then $u_t(c_t) := D(t)\, u(c_t)$. That is, focused thinkers put more weight on period t than on period t' if the discounted-utility distance between the best and worst alternative is larger for period t than for period t'.

A Subparagraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Yet Another Subparagraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

2.2.2.3 Hypotheses

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$. This gives rise to our first hypothesis:

Hypothesis 2.1. *This environment can be used to clearly state your hypothesis and set them apart from the body text.*

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$. Based on this, we can state our second hypothesis:

Hypothesis 2.2. *This environment can be used to clearly state your hypothesis and set them apart from the body text.*

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$.

2.3 Results

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A

Table 2.1. An Example Table

Dependent variable	$\hat{d}$
Estimate	0.123***
	(0.011)
Observations	750
Subjects	250

Notes: Standard errors in parentheses, clustered on the subject level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. With this, we can test our hypotheses.

2.3.1 Test of Hypothesis 2.1

Our first result supports Hypothesis 2.1. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. The analysis we conducted to obtain Result 2.1 is described in detail in Table 2.1. Let’s reference a section, a subsection, and a figure from the appendices: Section 2.C, Section 2.A.2, Figure 2.B.1.

Result 2.1. *Hello, here is some text without a meaning. This text should show what a printed text will look like at this place.* $\sin^2(\alpha) + \cos^2(\beta) = 1$. *If you read this text, you will get no information* $E = mc^2$. *Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text* like this *gives you information about the selected font, how the letters are written and an impression of the look.* $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. *This text should contain* all letters of the alphabet *and it should be written in of the original language.* $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. *There is no need for special contents, but the length of words should match the language.* $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will

get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

2.3.2 Test of Hypothesis 2.2

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$. We thereby test Hypothesis 2.2.

Result 2.2. *Hello, here is some text without a meaning. This text should show what a printed text will look like at this place.* $\sin^2(\alpha) + \cos^2(\beta) = 1$. *If you read this text, you will get no information* $E = mc^2$. *Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text* like this *gives you information about the selected font, how the letters are written and an impression of the look.* $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. *This text should contain* all letters of the alphabet *and it should be written in of the original language.* $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. *There is no need for special contents, but the length of words should match the language.* $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

Our second result provides evidence in support of Hypothesis 2.2. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

2.3.3 Heterogeneity

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will

get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{i=n} x_i = \frac{x_1 + x_2 + \ldots + x_n}{n}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\int_0^\infty e^{-\alpha x^2} \mathrm{d}x = \frac{1}{2}\sqrt{\int_{-\infty}^\infty e^{-\alpha x^2} \mathrm{d}x \int_{-\infty}^\infty e^{-\alpha y^2} \mathrm{d}y} = \frac{1}{2}\sqrt{\frac{\pi}{\alpha}}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\sum_{k=0}^\infty a_0 q^k = \lim_{n\to\infty}\sum_{k=0}^n a_0 q^k = \lim_{n\to\infty} a_0 \frac{1 - q^{n+1}}{1 - q} = \frac{a_0}{1 - q}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all* *letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-p \pm \sqrt{p^2 - 4q}}{2}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

$$\frac{\partial^2 \Phi}{\partial x^2} + \frac{\partial^2 \Phi}{\partial y^2} + \frac{\partial^2 \Phi}{\partial z^2} = \frac{1}{c^2} \frac{\partial^2 \Phi}{\partial t^2}$$

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b} = \sqrt[n]{a^n b}$.

2.3.4 Structural Estimation

Inspect the variance–covariance matrix $\mathbf{\Sigma}$:

$$\mathbf{\Sigma} := \mathrm{Cov}(\boldsymbol{X}) = \begin{bmatrix} \mathrm{Var}(X_1) & \cdots & \mathrm{Cov}(X_1, X_n) \\ \vdots & \ddots & \vdots \\ \mathrm{Cov}(X_n, X_1) & \cdots & \mathrm{Var}(X_n) \end{bmatrix}.$$

2.4 Discussion

2.4.1 Some Limitations

Let's reference some tables: Table 2.2 and Table 2.3. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If

Table 2.2. Points Awarded in Our Typeface Competition—Basic Formatting

	Utopia	Computer Modern	Charter	Times Roman	Palatino
Yoël	1	1	2	0	1
Çelik	2	0	2	1	0
Anità	1	2	1	2	0
Uğur	1	2	0	1	0
Håkan	1	0	2	0	1
Allison	2	0	1	2	1
Pía	1	0	2	1	0
David	1	0	2	1	1
Sum	10	5	12	8	4

you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

Table 2.3. Points Awarded in Our Typeface Competition—More Sophisticated Formatting

	Utopia[a]	Computer Modern[b]	Charter[c]	Times Roman[d]	Palatino[e]
Yoël	1	1	2	0	1
Çelik	2	0	2	1	0
Anità	1	2	1	2	0
Uğur	1	2	0	1	0
Håkan	1	0	2	0	1
Allison	2	0	1	2	1
Pía	1	0	2	1	0
David	1	0	2	1	1
Sum	10	5	12	8	4

[a] `\usepackage{fourier}`
[b] The LaTeX standard serif font.
[c] `\usepackage[charter]{mathdesign}`
[d] `\usepackage{newtxtext, newtxmath}`
[e] `\usepackage[sc]{mathpazo}`

2.4.2 Utility from Money

In deriving our predictions (Section 2.2.2), we assume that subjects base their decisions on utility derived from receiving monetary payments c_t at various dates t. We also make the standard assumption that utility from money is increasing in its argument but not convex, i.e., $u'(c_t) \geq 0$ and $u''(c_t) \leq 0$. Both assumptions are frequently made in studies on intertemporal decision making.

One way to justify the assumption of utility being based on money—rather than consumption—is that individuals anticipate to consume the payments that they receive at date t within a short period around t. Given that the maximum payment was below €20 and that any two payment dates were separated by at least two weeks, this seems reasonable (see the arguments in favor of this view in Halevy, 2014).

A second justification is consistency within the discipline: Halevy (2014) points out that "in the domain of risk and uncertainty … preferences are often defined over payments." In line with this, Kőszegi and Szeidl (2013, p. 62) make the same assumption of "money in the utility function":

> in some applications we also assume that monetary transactions induce *direct* utility consequences, so that for instance an agent making a payment experiences an immediate utility loss. The idea that people experience monetary transactions as immediate utility is both intuitively compelling and supported in the literature: … some evidence on individuals' attitudes toward money, such as narrow bracketing (…) and laboratory evidence on hyperbolic discounting (…), is difficult to explain without it.

Last but not least, the papers by McClure, Laibson, et al. (2004) and McClure, Ericson, et al. (2007) demonstrate that brain activation, as measured by functional magnetic resonance imaging, is similar for primary and monetary rewards.

Let us now discuss the second assumption: that utility from money is nonconvex. We find that subjects allocate more money to the concentrated payoffs in the unbalanced than in the associated balanced budget sets—which we call concentration bias. One might argue that this relative preference for concentrated payoffs can be explained by the per-period utility function over money being convex.

Obtaining evidence on the shape of utility over money is nontrivial because it requires that at least two monetary amounts be compared with each other without the one clearly dominating the other. Thus, estimates of the curvature of the utility function over money can be obtained in two ways: the monetary amounts must be paid in different states of the world, i.e., comprise a lottery, or they have to be paid at different points in time.[6] Both methods entail particular theoretical assumptions.

6. As a matter of fact, the latter was the motivation behind Samuelson (1937): "Under the following four assumptions, it is believed possible to arrive theoretically at a precise measure of the marginal utility of *money income* …" (p. 155; emphasis in the original).

Andersen et al. (2008) advocate the former approach and argue that when estimating time preference parameters, one should control for the curvature of the utility function through a measure of the curvature that is based on observed choices under risk. Their study and numerous other studies on risk attitudes consistently reveal that the vast majority of subjects is risk-averse even over small stakes. Hence, for the vast majority of subjects, utility over money is concave according to this methodology (ruling out probability weighting). Others, most notably Andreoni and Sprenger (2012), have argued that the degree of curvature measured via risky choices probably overstates the degree of curvature effective in intertemporal choices, but they also find that utility is concave (albeit close to linear). Given this unambiguous evidence from previous studies, it is implausible that our subjects exhibit convex utility over money.

2.5 Conclusion

Cite some more papers (Yaari, 1965; Warner and Pleeter, 2001; Davidoff, Brown, and Diamond, 2005; Benartzi, Previtero, and Thaler, 2011). Let's cite a book: Luce (1959). Let's cite a contribution to a collected volume: Harrison and Rutström (2008) and a collection (an edited volume) itself: Kagel and Roth (2016). Now let's cite presentations at conferences: Vosgerau, Bruyneel, Dhar, and Wertenbroch (2008) and Beute and Kort (2012). Attema, Bleichrodt, Gao, Huang, and Wakker (2016) propose a method for "measuring discounting without measuring utility"[7].

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. This text should contain *all letters of the alphabet* and it should be written in of the original language. There is no need for special contents, but the length of words should match the language.

Appendix 2.A Put More Complicated Derivations and Proofs Here

2.A.1 Appendix Subsection

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at

7. The basic idea of their method is intriguingly simple: Imagine an individual who is indifferent between, say, Option A: \$10 today and Option B: \$10 in one year plus \$10 in two years. With a constant annual discount factor δ, this indifference translates to $u(\$10) = \delta\, u(\$10) + \delta^2\, u(\$10)$, so that $u(\$10)$ cancels out, and δ can be readily calculated as the solution to $1 = \delta + \delta^2$.

this place. $\sin^2(\alpha)+\cos^2(\beta)=1$. If you read this text, you will get no information $E=mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text *like this* gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[n]{a}\cdot\sqrt[n]{b}=\sqrt[n]{ab}$. This text should contain *all letters of the alphabet* and it should be written in of the original language. $\frac{\sqrt[n]{a}}{\sqrt[n]{b}}=\sqrt[n]{\frac{a}{b}}$. There is no need for special contents, but the length of words should match the language. $a\sqrt[n]{b}=\sqrt[n]{a^nb}$.

(1) Erster Listenpunkt, Stufe 1
    a. Erster Listenpunkt, Stufe 2
        i. Erster Listenpunkt, Stufe 3
        ii. Zweiter Listenpunkt, Stufe 3
        iii. Dritter Listenpunkt, Stufe 3
        iv. Vierter Listenpunkt, Stufe 3
    b. Zweiter Listenpunkt, Stufe 2
    c. Dritter Listenpunkt, Stufe 2
    d. Vierter Listenpunkt, Stufe 2
(2) Zweiter Listenpunkt, Stufe 1
(3) Dritter Listenpunkt, Stufe 1
(4) Vierter Listenpunkt, Stufe 1

The typeset math below follows the ISO recommendations that only variables be set in italic. Note the use of upright shapes for “d,” “e,” and “π.” (These are entered as `\mathup{d}`, `\mathup{e}`, and `\mathup{\pi}`, respectively.)

Theorem 2.1 (Simplest form of the *Central Limit Theorem*). *Let $X_1, X_2, \dots, X_n$ be a sequence of i.i.d. random variables with mean* 0 *and variance* 1 *on a probability space* $(\Omega, \mathscr{F}, \mathbb{P})$. *Then*

$$\mathbb{P}\left(\frac{X_1+\cdots+X_n}{\sqrt{n}}\le y\right) \to \mathfrak{N}(y) := \int_{-\infty}^{y}\frac{\mathrm{e}^{-v^2/2}}{\sqrt{2\pi}}\,\mathrm{d}v \quad \textit{as } n\to\infty,$$

or, equivalently, letting $S_n := \sum_1^n X_k$,

$$\mathbb{E}f(S_n/\sqrt{n}) \to \int_{-\infty}^{\infty} f(v)\frac{\mathrm{e}^{-v^2/2}}{\sqrt{2\pi}}\,\mathrm{d}v \quad \textit{as } n\to\infty, \textit{ for every } f\in \mathrm{b}\mathscr{C}(\mathbb{R}).$$

2.A.2 Salience

Salience theory (Bordalo, Gennaioli, and Shleifer, 2012, 2013) represents a behavioral model according to which the most distinctive features of the available alternatives receive a particularly large share of attention and are therefore over-weighted. More precisely, a particular attribute out of all attributes of an alternative becomes the more salient, the more it differs from that attribute's average level over all available alternatives.

Formally, alternatives are assumed to be uniquely characterized by the values they take in $T \geq 1$ attributes (or, "dimensions"). Utility is assumed to be additively separable in attributes, and salience attaches a decision weight to each attribute of each good which indicates how salient the respective attribute is for that good. Suppose an agent chooses one alternative from some finite choice set $\boldsymbol{C}$. Let t index the T different attributes, and let k index the K available alternatives. Let $u_t(\cdot)$ denote the function which assigns utility to values in dimension t. Denote by a_t^k the level of attribute t of good k and define $u_t^k := u_t(a_t^k)$ as the utility that dimension t of good k yields. Let $\overline{u}_t$ be the average utility level, across all K goods, of dimension t. The salience of each dimension of good k is determined by a symmetric and continuous salience function $\sigma(\cdot,\cdot)$ that satisfies the following two properties:

(1) *Ordering.* Let $\mu := \mathrm{sgn}(u_t^k - \overline{u}_t)$. Then for any $\epsilon, \epsilon' \geq 0$ with $\epsilon + \epsilon' > 0$, it holds that
$$\sigma(u_t^k + \mu\epsilon, \overline{u}_t - \mu\epsilon') \;>\; \sigma(u_t^k, \overline{u}_t). \tag{2.A.1}$$

(2) *Diminishing sensitivity.* For any $u_t^k, \overline{u}_t \geq 0$ and all $\epsilon > 0$, it holds that
$$\sigma(u_t^k + \epsilon, \overline{u}_t + \epsilon) \;<\; \sigma(u_t^k, \overline{u}_t). \tag{2.A.2}$$

Following the smooth salience characterization proposed in Bordalo, Gennaioli, and Shleifer (2012, p. 1255), each dimension t of good k receives weight $\Delta^{-\sigma(u_t^k, \overline{u}_t)}$, where $\Delta \in (0,1]$ is a constant that captures an agent's susceptibility to salience. $\Delta = 1$ gives rise to a rational decision maker, and the smaller Δ, the stronger is the salience bias. We call an agent with $\Delta < 1$ a salient thinker.

A reference with a large number of authors is Henrich, Boyd, Bowles, Camerer, Fehr, et al. (2005).

Appendix 2.B Some Additional Figures

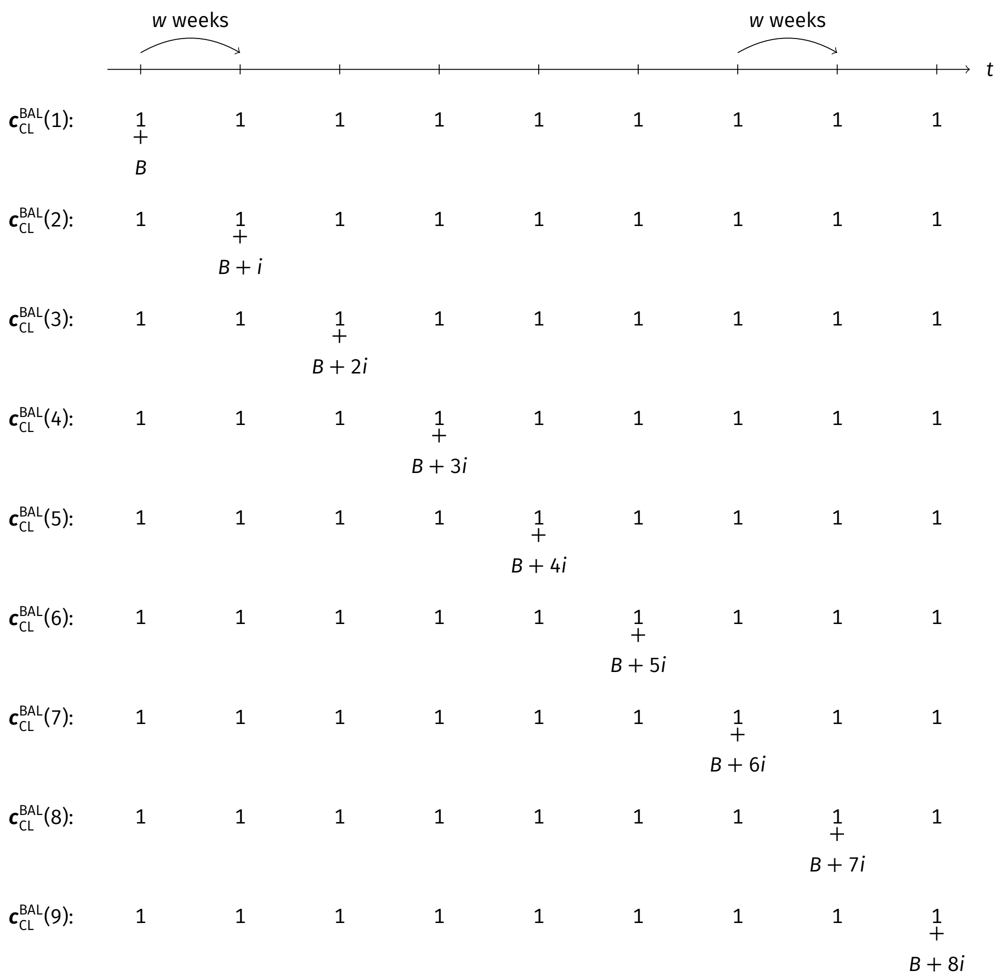


Figure 2.B.1. Earnings Sequences Included in Choice List $\boldsymbol{C}_{CL}^{BAL}$

Notes: For the values of B, i, and w that we used see Section 2.2. Figure taken from Dertwinkel-Kalt et al. (2017).

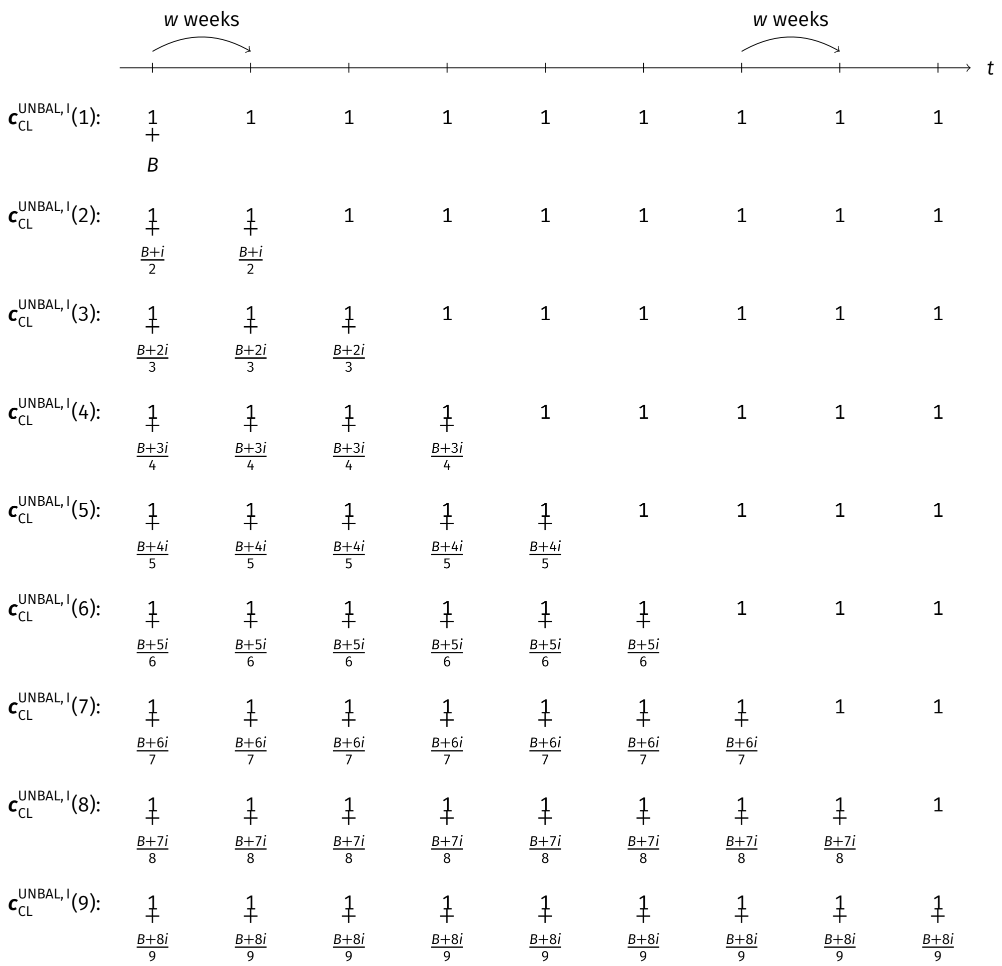


Figure 2.B.2. Earnings Sequences Included in Choice List $\boldsymbol{C}_{CL}^{UNBAL,I}$

Notes: For the values of B, i, and w that we used see Section 2.2. Figure taken from Dertwinkel-Kalt et al. (2017).

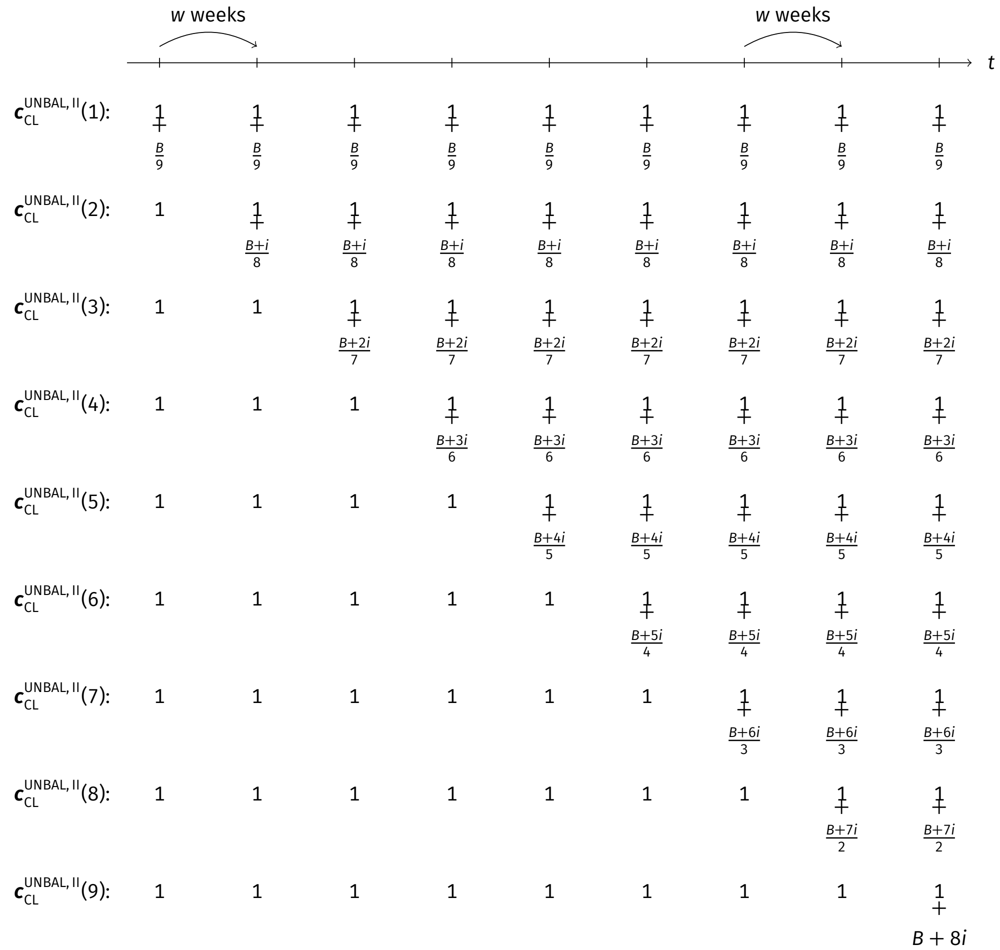


Figure 2.B.3. Earnings Sequences Included in Choice List $\boldsymbol{C}_{CL}^{UNBAL,II}$

Notes: For the values of B, i, and w that we used see Section 2.2. Figure taken from Dertwinkel-Kalt et al. (2017).

Appendix 2.C `siunitx` Example Tables

Table 2.C.1. An Example of a Regression Table (Adapted from Gerhardt, Schildberg-Hörisch, and Willrodt, 2017). Never Forget to Mention the Dependent Variable!

	(1)	(2)	(3)	(4)	(5)
Treatment	−0.390	−0.228	−0.729*	−0.449*	−0.453**
	(+0.352)	(−0.205)	[+0.377]	[−0.245]	{+0.204}
Female	0.948***	0.061	0.188	0.305	0.385*
	(0.354)	(0.233)	(0.372)	(0.226)	(0.222)
Female × Treatment	0.169	0.251	0.892*	0.454	0.439
	(0.514)	(0.325)	(0.533)	(0.341)	(0.307)
Final high school grade	−0.101	0.013	0.076	0.117	0.039
	(0.198)	(0.144)	(0.224)	(0.146)	(0.133)
Trait self-control	−0.016	0.002	−0.016	−0.000	−0.007
	(0.016)	(0.010)	(0.015)	(0.010)	(0.009)
Constant	2.357***	1.512***	−0.322	2.158***	1.437***
	(0.239)	(0.144)	(0.265)	(0.161)	(0.152)
Observations	303	289	295	304	1191
R^2	0.057	0.008	0.039	0.043	0.024
Treatment × (1 + Female)	−0.221	0.023	0.163	0.004	−0.014
p_F[Treatment × (1 + Female) = 0]	0.327	0.008	0.192	0.000	0.003

Notes: Dependent variable: $m_{\sim}$. Robust standard errors (cluster-corrected for column 5) in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Missing observations ($N < 308$) due to exclusion of trials in which subjects behaved irrationally (i.e., chose a dominated option). The regressors Final high school grade and Trait self-control are mean-centered.

Table 2.C.2. Figure Grouping via `siunitx` in a Table.

(1)	(2)	(3)
−0.100*	−0.100 01*	−123 456.444***
(2.871)	(2.871 23)	[+50 000.123]

Table 2.C.3. Overview of the Choice Lists Presented to Subjects (Adapted from Gerhardt, Schildberg-Hörisch, and Willrodt, 2017).

	Alternative ***A***				Alternative ***B***			
	$c_{A,1}$	$p_{A,1}$	$c_{A,2}$	$p_{A,2}$	$c_{B,1}$	$p_{B,1}$	$c_{B,2}$	$p_{B,2}$
Choice List I: risky/risky (x = €22.00, r = €7.50, k = €11.50; 25 rows)								
Top row	€ 3.00	50%	€22.00	50%	€ 3.00	50%	€ 7.00	50%
Center row	€ 3.00	50%	€22.00	50%	€ 9.00	50%	€13.00	50%
Row with $m = 0$	€ 3.00	50%	€22.00	50%	€10.50	50%	€14.50	50%
Bottom row	€ 3.00	50%	€22.00	50%	€15.00	50%	€19.00	50%
Choice List II: safe/risky (x = €16.00, r = €5.00, k = €5.00; 19 rows)								
Top row	€11.00	100%			€11.00	50%	€21.00	50%
Center row	€11.00	100%			€ 6.50	50%	€16.50	50%
Row with $m = 0$	€11.00	100%			€ 6.00	50%	€16.00	50%
Bottom row	€11.00	100%			€ 2.00	50%	€12.00	50%
Choice List III: "long shot" (x = €14.00, r = −€36.00, k = €7.00; 21 rows)								
Top row	€ 7.00	90%	€50.00	10%	€ 7.00	90%	€10.00	10%
Row with $m = 0$	€ 7.00	90%	€50.00	10%	€11.00	90%	€14.00	10%
Center row	€ 7.00	90%	€50.00	10%	€12.00	90%	€15.00	10%
Bottom row	€ 7.00	90%	€50.00	10%	€17.00	90%	€20.00	10%
Choice List IV: delayed payoffs (x = €18.00, r = €6.00, k = €8.50, paid in one week; 20 rows)								
Top row	€ 9.50	50%	€12.00	50%	€ 9.50	50%	€24.00	50%
Above-center row	€ 9.50	50%	€12.00	50%	€ 5.00	50%	€19.50	50%
Below-center row	€ 9.50	50%	€12.00	50%	€ 4.50	50%	€19.00	50%
Row with $m = 0$	€ 9.50	50%	€12.00	50%	€ 3.50	50%	€18.00	50%
Bottom row	€ 9.50	50%	€12.00	50%	€ 0.00	50%	€14.50	50%

References

Andersen, Steffen, Glenn W. Harrison, Morten I. Lau, and E. Elisabet Rutström. 2008. "Eliciting Risk and Time Preferences." *Econometrica* 76 (3): 583–618. DOI: 10.1111/j.1468-0262.2008.00848.x. [35, 54]

Andreoni, James, and Charles Sprenger. 2012. "Estimating Time Preferences from Convex Budgets." *American Economic Review* 102 (7): 3333–56. DOI: 10.1257/aer.102.7.3333. [35, 54]

Attema, Arthur E., Han Bleichrodt, Yu Gao, Zhenxing Huang, and Peter P. Wakker. 2016. "Measuring Discounting without Measuring Utility." *American Economic Review* 106 (6): 1476–94. DOI: 10.1257/aer.20150208. [54]

Balakrishnan, Uttara, Johannes Haushofer, and Pamela Jakiela. 2016. "How Soon Is Now? Evidence of Present Bias from Convex Time Budget Experiments." IZA Discussion Paper. URL: http://ftp.iza.org/dp9653.pdf. [35]

Benartzi, Shlomo, Alessandro Previtero, and Richard H. Thaler. 2011. "Annuitization Puzzles." *Journal of Economic Perspectives* 25 (4): 143–64. DOI: 10.1257/jep.25.4.143. [54]

Beute, Femke, and Yvonne A. W. de Kort. 2012. "Always Look on the Bright Side of Life: Ego-Replenishing Effects of Daylight versus Artificial Light." In *Proceedings of Experiencing Light 2012: International Conference on the Effects of Light on Wellbeing*. Edited by Y. A. W. de Kort, M. P. J. Aarts, F. Beute, A. Haans, W. A. IJsselsteijn, D. Lakens, K. C. H. J. Smolders, and L. van Rijswijk. Eindhoven University of Technology. Eindhoven, The Netherlands, 1–4. URL: http://2012.experiencinglight.nl/doc/41.pdf. [54]

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer. 2012. "Salience Theory of Choice Under Risk." *Quarterly Journal of Economics* 127 (3): 1243–85. DOI: 10.1093/qje/qjs018. [36, 56]

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer. 2013. "Salience and Consumer Choice." *Journal of Political Economy* 121 (5): 803–43. DOI: 10.1086/673885. [36, 56]

Bushong, Benjamin, Matthew Rabin, and Joshua Schwartzstein. 2016. "A Model of Relative Thinking." Working paper. Cambridge, MA, USA: Harvard University. URL: http://people.hbs.edu/jschwartzstein/RelativeThinking.pdf. [36]

Davidoff, Thomas, Jeffrey R. Brown, and Peter A. Diamond. 2005. "Annuities and Individual Welfare." *American Economic Review* 95 (5): 1573–90. DOI: 10.1257/000282805775014281. [54]

Dertwinkel-Kalt, Markus, Holger Gerhardt, Gerhard Riener, Frederik Schwerter, and Louis Strang. 2017. "Concentration Bias in Intertemporal Choice." Working paper. Bonn, Germany, et al.: University of Bonn et al. URL: https://www.dropbox.com/s/dv20mcu0qkygmjz/Concentration_Bias_in_Intertemporal_Choice.pdf. [39, 40, 57–59]

Gabaix, Xavier. 2014. "A Sparsity-Based Model of Bounded Rationality." *Quarterly Journal of Economics* 129 (4): 1661–710. DOI: 10.1093/qje/qju024. [36]

Gerhardt, Holger, Hannah Schildberg-Hörisch, and Jana Willrodt. 2017. "Does self-control depletion affect risk attitudes?" *European Economic Review* 100 (November): 463–87. DOI: 10.1016/j.euroecorev.2017.09.004. [60, 61]

Halevy, Yoram. 2014. "Some Comments on the Use of Monetary and Primary Rewards in the Measurement of Time Preferences." Working paper. University of British Columbia. URL: http://faculty.arts.ubc.ca/yhalevy/monetary_primary.pdf. [44, 53]

Harrison, Glenn W., and E. Elisabet Rutström. 2008. "Risk Aversion in the Laboratory." In *Risk Aversion in Experiments*. Edited by Glenn W. Harrison and James C. Cox. Vol. 12, Research in Experimental Economics. Bingley, UK: Emerald Group. Chapter 1, 41–196. DOI: 10.1016/S0193-2306(08)00003-3. [54]

Henrich, Joseph, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, Richard McElreath, Michael Alvard, Abigail Barr, Jean Ensminger, Natalie Smith Henrich, Kim Hill, Francisco Gil-White, Michael Gurven, Frank W. Marlowe, John Q. Patton, and David Tracer. 2005. "'Economic man' in cross-cultural perspective: Behavioral experiments in 15 small-scale societies." *Behavioral and Brain Sciences* 28 (6): 795–815, discussion 815–55. DOI: 10.1017/S0140525X05000142. [56]

Kagel, John H., and Alvin E. Roth, editors. 2016. *The Handbook of Experimental Economics*. Vol. 2, Princeton, NJ, USA: Princeton University Press. [54]

Kőszegi, Botond, and Adam Szeidl. 2013. "A Model of Focusing in Economic Choice." *Quarterly Journal of Economics* 128 (1): 53–104. DOI: 10.1093/qje/qjs049. [35, 36, 44, 46, 53]

Luce, R. Duncan. 1959. *Individual Choice Behavior: A Theoretical Analysis*. New York, NY, USA: John Wiley & Sons. [54]

McClure, Samuel M., Keith M. Ericson, David Laibson, George Loewenstein, and Jonathan D. Cohen. 2007. "Time Discounting for Primary Rewards." *Journal of Neuroscience* 27 (21): 5796–804. DOI: 10.1523/JNEUROSCI.4246-06.2007. [44, 53]

McClure, Samuel M., David Laibson, George Loewenstein, and Jonathan D. Cohen. 2004. "Separate Neural Systems Value Immediate and Delayed Monetary Rewards." *Science* 306 (5695): 503–7. DOI: 10.1126/science.1100907. [44, 53]

Samuelson, Paul. 1937. "A Note on Measurement of Utility." *Review of Economic Studies* 4 (2): 155–61. DOI: 10.2307/2967612. [53]

Sims, Christopher A. 2003. "Implications of rational inattention." *Journal of Monetary Economics* 50 (3): 665–90. DOI: 10.1016/S0304-3932(03)00029-1. [36]

Sullivan, Paul. 2016. "Fresh Thinking on Saving." *New York Times* (New York edition), March 27, 2016: F2. URL: http://nytimes.com/2016/03/27/your-money/getting-workers-to-save-more-for-retirement.html. [35]

Taubinsky, Dmitry. 2014. "From Intentions to Actions: A Model and Experimental Evidence of Inattentive Choice." Working paper. Hanover, NH, USA: Dartmouth College. URL: https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxkbWl0cnlwYXBlcnN8Z3g6NmIzYWM0MWIwNTc4MjkwNQ. [36]

Vosgerau, Joachim, Sabrina Bruyneel, Ravi Dhar, and Klaus Wertenbroch. 2008. "Ego Depletion and Cognitive Load: Same or Different Constructs?" In *Advances in Consumer Research*. Vol. 35, Association for Consumer Research, 217–20. URL: http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=13549. [54]

Warner, John T., and Saul Pleeter. 2001. "The Personal Discount Rate: Evidence from Military Downsizing Programs." *American Economic Review* 91 (1): 33–53. DOI: 10.1257/aer.91.1.33. [54]

Yaari, Menahem E. 1965. "Uncertain Lifetime, Life Insurance, and the Theory of the Consumer." *Review of Economic Studies* 32 (2): 137–50. DOI: 10.2307/2296058. [54]

Chapter 3

Math Tests

3.1 Math Test Serif

3.1.1 Overview Serif

Default: $a\alpha\mathrm{\alpha}b\beta G\Gamma\mathrm{\Gamma}P\Pi\Sigma\sigma$; $\sigma_\epsilon, c^\alpha$
mathnormal: $\mathnormal{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathrm: $\mathrm{a\alpha\alpha b}\beta\mathrm{G\Gamma\Gamma P\Pi\Sigma}\sigma$
mathup: $\mathup{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $\mathit{a\alpha\alpha b\beta G``P''^\circ\sigma}$
mathbf: $\mathbf{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\mathbfit{a\alpha b\beta G``P''^\circ\sigma}$
mathbfup: $\mathbfup{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $\boldsymbol{a\alpha\mathrm{\alpha}b\beta G\Gamma\mathrm{\Gamma}P\Pi\Sigma\sigma}$; $\boldsymbol{\sigma_\epsilon, c^\alpha}$
mathnormal: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathrm: $\mathbf{a\alpha\alpha b}\boldsymbol{\beta}\mathbf{G\Gamma\Gamma P\Pi\Sigma}\boldsymbol{\sigma}$
mathup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $\boldsymbol{a\alpha\alpha b\beta G``P''^\circ\sigma}$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G``P''^\circ\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $a\alpha\mathrm{\alpha}b\beta G\Gamma\mathrm{\Gamma}P\Pi\Sigma\sigma$; $\sigma_\varepsilon, c^\alpha$
mathnormal: $a\alpha\mathrm{\alpha}b\beta G\Gamma\mathrm{\Gamma}P\Pi\Sigma\sigma$
mathrm: $\mathrm{a\alpha\alpha b}\beta\mathrm{G\Gamma\Gamma P\Pi\Sigma}\sigma$
mathup: $\mathup{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $\mathit{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $\alpha a \alpha b \beta G \Gamma \mathit{\Gamma} P \Pi \Sigma \sigma; \sigma_\varepsilon, c^\alpha$
mathnormal: $\mathnormal{\alpha a \alpha b \beta G \Gamma \Gamma P \Pi \Sigma \sigma}$
mathrm: $\mathrm{a}\alpha\mathrm{a}\mathrm{b}\beta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\sigma$
mathup: $\mathup{\alpha a \alpha b \beta G \Gamma \Gamma P \Pi \Sigma \sigma}$
mathit: $\mathit{\alpha a \alpha b \beta G \Gamma \Gamma P \Pi \Sigma \sigma}$
mathbf: $\mathbf{\alpha a \alpha b \beta G \Gamma \Gamma P \Pi \Sigma \sigma}$
mathbfit: $\mathbfit{\alpha a \alpha b \beta G \Gamma \Gamma P \Pi \Sigma \sigma}$
mathbfup: $\mathbfup{\alpha a \alpha b \beta G \Gamma \Gamma P \Pi \Sigma \sigma}$

3.1.2 Formulas Serif

$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega, F,$
$\boldsymbol{\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega, F,}$
$\alpha, \beta, \gamma, \delta, \varepsilon, \varepsilon, \zeta, \eta, \theta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \pi, \rho, \rho, \sigma, \varsigma, \tau, \upsilon, \phi, \phi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega, F,$
$\boldsymbol{\alpha, \beta, \gamma, \delta, \varepsilon, \varepsilon, \zeta, \eta, \theta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \pi, \rho, \rho, \sigma, \varsigma, \tau, \upsilon, \phi, \phi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega, F,}$
$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{\nu \to \infty} \nu(\nu) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x f(x)\,\mathrm{d}x = \left(\frac{27}{2}\right)$$

$\boldsymbol{\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda}$
$\boldsymbol{\lim_{\nu \to \infty} \nu(\nu) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7}$
$\boldsymbol{\hat{\beta} = (X'X)^{-1}X'y}$

$$\boldsymbol{\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)}$$

$$\boldsymbol{\int_{-\infty}^{\infty} x f(x)\,\mathrm{d}x = \left(\frac{27}{2}\right)}$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{\nu \to \infty} \nu(\nu) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N\to\infty}\sum_{i=0}^{N} x^i = \min_{x\in\mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x\, f(x)\,\mathrm{d}x = \binom{27}{2}$$

$\boldsymbol{\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda}$
$\boldsymbol{\lim_{v\to\infty} v(v) = \max_{s\in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7}$
$\boldsymbol{\hat{\beta} = (X'X)^{-1}X'y}$

$$\boldsymbol{\lim_{N\to\infty}\sum_{i=0}^{N} x^i = \min_{x\in\mathbb{R}} S(x)}$$

$$\boldsymbol{\int_{-\infty}^{\infty} x\, f(x)\,\mathrm{d}x = \binom{27}{2}}$$

3.1.3 Math Alphabets Serif

Default

$$0,1,2,3,4,5,6,7,8,9,$$
$$A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,$$
$$a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,$$
$$A,B,\mathit{\Gamma},\mathit{\Delta},E,Z,H,\mathit{\Theta},I,K,\mathit{\Lambda},M,N,\mathit{\Xi},O,\mathit{\Pi},P,\mathit{\Sigma},T,\mathit{\Upsilon},\mathit{\Phi},X,\mathit{\Psi},\mathit{\Omega},$$
$$\alpha,\beta,\gamma,\delta,\epsilon,\zeta,\eta,\theta,\iota,\kappa,\lambda,\mu,\nu,\xi,o,\pi,\rho,\sigma,\tau,\upsilon,\phi,\chi,\psi,\omega,\varepsilon,\vartheta,\varpi,\varrho,\varsigma,\varphi,$$

Math Normal (`\mathnormal`)

$$\mathnormal{0,1,2,3,4,5,6,7,8,9,}$$
$$\mathnormal{A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,}$$
$$\mathnormal{a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,}$$
$$\mathnormal{A,B,\Gamma,\Delta,E,Z,H,\Theta,I,K,\Lambda,M,N,\Xi,O,\Pi,P,\Sigma,T,\Upsilon,\Phi,X,\Psi,\Omega,}$$
$$\mathnormal{\alpha,\beta,\gamma,\delta,\epsilon,\zeta,\eta,\theta,\iota,\kappa,\lambda,\mu,\nu,\xi,o,\pi,\rho,\sigma,\tau,\upsilon,\phi,\chi,\psi,\omega,\varepsilon,\vartheta,\varpi,\varrho,\varsigma,\varphi,}$$

Math Italic (`\mathit`)

$$\mathit{0,1,2,3,4,5,6,7,8,9,}$$
$$\mathit{A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,}$$
$$\mathit{a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,}$$
$$A,B,\grave{},\acute{},E,Z,H,\hat{},I,K,\tilde{},M,N,\ddot{},O,\text{\H{}},P,\mathring{},T,\check{},\breve{},X,\bar{},\dot{},$$
$$\alpha,\beta,\gamma,\delta,\epsilon,\zeta,\eta,\theta,\iota,\kappa,\lambda,\mu,\nu,\xi,o,\pi,\rho,\sigma,\tau,\upsilon,\phi,\chi,\psi,\omega,\varepsilon,\vartheta,\varpi,\varrho,\varsigma,\varphi,$$

Math Roman (`\mathrm`)

$$\mathrm{0,1,2,3,4,5,6,7,8,9,}$$
$$\mathrm{A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,}$$
$$\mathrm{a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,}$$
$$\mathrm{A,B,\Gamma,\Delta,E,Z,H,\Theta,I,K,\Lambda,M,N,\Xi,O,\Pi,P,\Sigma,T,\Upsilon,\Phi,X,\Psi,\Omega,}$$
$$\alpha,\beta,\gamma,\delta,\epsilon,\zeta,\eta,\theta,\iota,\kappa,\lambda,\mu,\nu,\xi,\mathrm{o},\pi,\rho,\sigma,\tau,\upsilon,\phi,\chi,\psi,\omega,\varepsilon,\vartheta,\varpi,\varrho,\varsigma,\varphi,$$

Math Bold (`\mathbf`)

$$\mathbf{0,1,2,3,4,5,6,7,8,9,}$$
$$\boldsymbol{A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z,}$$
$$\boldsymbol{a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u,v,w,x,y,z,}$$
$$\boldsymbol{A,B,\Gamma,\Delta,E,Z,H,\Theta,I,K,\Lambda,M,N,\Xi,O,\Pi,P,\Sigma,T,\Upsilon,\Phi,X,\Psi,\Omega,}$$
$$\boldsymbol{\alpha},\boldsymbol{\beta},\gamma,\boldsymbol{\delta},\epsilon,\zeta,\boldsymbol{\eta},\boldsymbol{\theta},\iota,\boldsymbol{\kappa},\boldsymbol{\lambda},\mu,\nu,\xi,\mathbf{o},\pi,\boldsymbol{\rho},\boldsymbol{\sigma},\tau,\upsilon,\boldsymbol{\phi},\boldsymbol{\chi},\psi,\boldsymbol{\omega},\boldsymbol{\varepsilon},\boldsymbol{\vartheta},\boldsymbol{\varpi},\varrho,\varsigma,\varphi,$$

Caligraphic (`\mathcal`)

$$\mathcal{A},\mathcal{B},\mathcal{C},\mathcal{D},\mathcal{E},\mathcal{F},\mathcal{G},\mathcal{H},\mathcal{I},\mathcal{J},\mathcal{K},\mathcal{L},\mathcal{M},\mathcal{N},\mathcal{O},\mathcal{P},\mathcal{Q},\mathcal{R},\mathcal{S},\mathcal{T},\mathcal{U},\mathcal{V},\mathcal{W},\mathcal{X},\mathcal{Y},\mathcal{Z},$$

Script (`\mathscr`)

$$\mathscr{A},\mathscr{B},\mathscr{C},\mathscr{D},\mathscr{E},\mathscr{F},\mathscr{G},\mathscr{H},\mathscr{I},\mathscr{J},\mathscr{K},\mathscr{L},\mathscr{M},\mathscr{N},\mathscr{O},\mathscr{P},\mathscr{Q},\mathscr{R},\mathscr{S},\mathscr{T},\mathscr{U},\mathscr{V},\mathscr{W},\mathscr{X},\mathscr{Y},\mathscr{Z},$$

Fraktur (`\mathfrak`)

$$\mathfrak{A},\mathfrak{B},\mathfrak{C},\mathfrak{D},\mathfrak{E},\mathfrak{F},\mathfrak{G},\mathfrak{H},\mathfrak{I},\mathfrak{J},\mathfrak{K},\mathfrak{L},\mathfrak{M},\mathfrak{N},\mathfrak{O},\mathfrak{P},\mathfrak{Q},\mathfrak{R},\mathfrak{S},\mathfrak{T},\mathfrak{U},\mathfrak{V},\mathfrak{W},\mathfrak{X},\mathfrak{Y},\mathfrak{Z},$$
$$\mathfrak{a},\mathfrak{b},\mathfrak{c},\mathfrak{d},\mathfrak{e},\mathfrak{f},\mathfrak{g},\mathfrak{h},\mathfrak{i},\mathfrak{j},\mathfrak{k},\mathfrak{l},\mathfrak{m},\mathfrak{n},\mathfrak{o},\mathfrak{p},\mathfrak{q},\mathfrak{r},\mathfrak{s},\mathfrak{t},\mathfrak{u},\mathfrak{v},\mathfrak{w},\mathfrak{x},\mathfrak{y},\mathfrak{z},$$

Blackboard Bold (`\mathbb`)

$$\mathbb{A},\mathbb{B},\mathbb{C},\mathbb{D},\mathbb{E},\mathbb{F},\mathbb{G},\mathbb{H},\mathbb{I},\mathbb{J},\mathbb{K},\mathbb{L},\mathbb{M},\mathbb{N},\mathbb{O},\mathbb{P},\mathbb{Q},\mathbb{R},\mathbb{S},\mathbb{T},\mathbb{U},\mathbb{V},\mathbb{W},\mathbb{X},\mathbb{Y},\mathbb{Z},$$

3.1.4 Character Sidebearings Serif

Default

$$|A| + |B| + |C| + |D| + |E| + |F| + |G| + |H| + |I| + |J| + |K| + |L| + |M| +$$
$$|N| + |O| + |P| + |Q| + |R| + |S| + |T| + |U| + |V| + |W| + |X| + |Y| + |Z| +$$
$$|a| + |b| + |c| + |d| + |e| + |f| + |g| + |h| + |i| + |j| + |k| + |l| + |m| +$$
$$|n| + |o| + |p| + |q| + |r| + |s| + |t| + |u| + |v| + |w| + |x| + |y| + |z| +$$
$$|A| + |B| + |\mathit{\Gamma}| + |\mathit{\Delta}| + |E| + |Z| + |H| + |\mathit{\Theta}| + |I| + |K| + |\mathit{\Lambda}| + |M| +$$
$$|N| + |\mathit{\Xi}| + |O| + |\mathit{\Pi}| + |P| + |\mathit{\Sigma}| + |T| + |\mathit{\Upsilon}| + |\mathit{\Phi}| + |X| + |\mathit{\Psi}| + |\mathit{\Omega}| +$$
$$|\alpha| + |\beta| + |\gamma| + |\delta| + |\epsilon| + |\zeta| + |\eta| + |\theta| + |\iota| + |\kappa| + |\lambda| + |\mu| +$$
$$|\nu| + |\xi| + |o| + |\pi| + |\rho| + |\sigma| + |\tau| + |\upsilon| + |\phi| + |\chi| + |\psi| + |\omega| +$$
$$|\varepsilon| + |\vartheta| + |\varpi| + |\varrho| + |\varsigma| + |\varphi| +$$

Math Roman (`\mathrm`)

$$|\mathrm{A}| + |\mathrm{B}| + |\mathrm{C}| + |\mathrm{D}| + |\mathrm{E}| + |\mathrm{F}| + |\mathrm{G}| + |\mathrm{H}| + |\mathrm{I}| + |\mathrm{J}| + |\mathrm{K}| + |\mathrm{L}| + |\mathrm{M}| +$$
$$|\mathrm{N}| + |\mathrm{O}| + |\mathrm{P}| + |\mathrm{Q}| + |\mathrm{R}| + |\mathrm{S}| + |\mathrm{T}| + |\mathrm{U}| + |\mathrm{V}| + |\mathrm{W}| + |\mathrm{X}| + |\mathrm{Y}| + |\mathrm{Z}| +$$
$$|\mathrm{a}| + |\mathrm{b}| + |\mathrm{c}| + |\mathrm{d}| + |\mathrm{e}| + |\mathrm{f}| + |\mathrm{g}| + |\mathrm{h}| + |\mathrm{i}| + |\mathrm{j}| + |\mathrm{k}| + |\mathrm{l}| + |\mathrm{m}| +$$
$$|\mathrm{n}| + |\mathrm{o}| + |\mathrm{p}| + |\mathrm{q}| + |\mathrm{r}| + |\mathrm{s}| + |\mathrm{t}| + |\mathrm{u}| + |\mathrm{v}| + |\mathrm{w}| + |\mathrm{x}| + |\mathrm{y}| + |\mathrm{z}| +$$
$$|\mathrm{A}| + |\mathrm{B}| + |\Gamma| + |\Delta| + |\mathrm{E}| + |\mathrm{Z}| + |\mathrm{H}| + |\Theta| + |\mathrm{I}| + |\mathrm{K}| + |\Lambda| + |\mathrm{M}| +$$
$$|\mathrm{N}| + |\Xi| + |\mathrm{O}| + |\Pi| + |\mathrm{P}| + |\Sigma| + |\mathrm{T}| + |\Upsilon| + |\Phi| + |\mathrm{X}| + |\Psi| + |\Omega| +$$

Math Bold (`\mathbf`)

$$|\boldsymbol{A}| + |\boldsymbol{B}| + |\boldsymbol{C}| + |\boldsymbol{D}| + |\boldsymbol{E}| + |\boldsymbol{F}| + |\boldsymbol{G}| + |\boldsymbol{H}| + |\boldsymbol{I}| + |\boldsymbol{J}| + |\boldsymbol{K}| + |\boldsymbol{L}| + |\boldsymbol{M}| +$$
$$|\boldsymbol{N}| + |\boldsymbol{O}| + |\boldsymbol{P}| + |\boldsymbol{Q}| + |\boldsymbol{R}| + |\boldsymbol{S}| + |\boldsymbol{T}| + |\boldsymbol{U}| + |\boldsymbol{V}| + |\boldsymbol{W}| + |\boldsymbol{X}| + |\boldsymbol{Y}| + |\boldsymbol{Z}| +$$
$$|\boldsymbol{a}| + |\boldsymbol{b}| + |\boldsymbol{c}| + |\boldsymbol{d}| + |\boldsymbol{e}| + |\boldsymbol{f}| + |\boldsymbol{g}| + |\boldsymbol{h}| + |\boldsymbol{i}| + |\boldsymbol{j}| + |\boldsymbol{k}| + |\boldsymbol{l}| + |\boldsymbol{m}| +$$
$$|\boldsymbol{n}| + |\boldsymbol{o}| + |\boldsymbol{p}| + |\boldsymbol{q}| + |\boldsymbol{r}| + |\boldsymbol{s}| + |\boldsymbol{t}| + |\boldsymbol{u}| + |\boldsymbol{v}| + |\boldsymbol{w}| + |\boldsymbol{x}| + |\boldsymbol{y}| + |\boldsymbol{z}| +$$
$$|\boldsymbol{A}| + |\boldsymbol{B}| + |\boldsymbol{\varGamma}| + |\boldsymbol{\varDelta}| + |\boldsymbol{E}| + |\boldsymbol{Z}| + |\boldsymbol{H}| + |\boldsymbol{\varTheta}| + |\boldsymbol{I}| + |\boldsymbol{K}| + |\boldsymbol{\varLambda}| + |\boldsymbol{M}| +$$
$$|\boldsymbol{N}| + |\boldsymbol{\varXi}| + |\boldsymbol{O}| + |\boldsymbol{\varPi}| + |\boldsymbol{P}| + |\boldsymbol{\varSigma}| + |\boldsymbol{T}| + |\boldsymbol{\varUpsilon}| + |\boldsymbol{\varPhi}| + |\boldsymbol{X}| + |\boldsymbol{\varPsi}| + |\boldsymbol{\varOmega}| +$$

Math Calligraphic (`\mathcal`)

$$|\mathcal{A}| + |\mathcal{B}| + |\mathcal{C}| + |\mathcal{D}| + |\mathcal{E}| + |\mathcal{F}| + |\mathcal{G}| + |\mathcal{H}| + |\mathcal{I}| + |\mathcal{J}| + |\mathcal{K}| + |\mathcal{L}| + |\mathcal{M}| +$$
$$|\mathcal{N}| + |\mathcal{O}| + |\mathcal{P}| + |\mathcal{Q}| + |\mathcal{R}| + |\mathcal{S}| + |\mathcal{T}| + |\mathcal{U}| + |\mathcal{V}| + |\mathcal{W}| + |\mathcal{X}| + |\mathcal{Y}| + |\mathcal{Z}| +$$

3.1.5 Superscript Positioning Serif

Default

$$A^2 + B^2 + C^2 + D^2 + E^2 + F^2 + G^2 + H^2 + I^2 + J^2 + K^2 + L^2 + M^2 +$$
$$N^2 + O^2 + P^2 + Q^2 + R^2 + S^2 + T^2 + U^2 + V^2 + W^2 + X^2 + Y^2 + Z^2 +$$
$$a^2 + b^2 + c^2 + d^2 + e^2 + f^2 + g^2 + h^2 + i^2 + j^2 + k^2 + l^2 + m^2 +$$
$$n^2 + o^2 + p^2 + q^2 + r^2 + s^2 + t^2 + u^2 + v^2 + w^2 + x^2 + y^2 + z^2 +$$
$$A^2 + B^2 + \mathit{\Gamma}^2 + \mathit{\Delta}^2 + E^2 + Z^2 + H^2 + \mathit{\Theta}^2 + I^2 + K^2 + \mathit{\Lambda}^2 + M^2 +$$
$$N^2 + \mathit{\Xi}^2 + O^2 + \mathit{\Pi}^2 + P^2 + \mathit{\Sigma}^2 + T^2 + \mathit{\Upsilon}^2 + \mathit{\Phi}^2 + X^2 + \mathit{\Psi}^2 + \mathit{\Omega}^2 +$$
$$\alpha^2 + \beta^2 + \gamma^2 + \delta^2 + \epsilon^2 + \zeta^2 + \eta^2 + \theta^2 + \iota^2 + \kappa^2 + \lambda^2 + \mu^2 +$$
$$\nu^2 + \xi^2 + o^2 + \pi^2 + \rho^2 + \sigma^2 + \tau^2 + \upsilon^2 + \phi^2 + \chi^2 + \psi^2 + \omega^2 +$$
$$\varepsilon^2 + \vartheta^2 + \varpi^2 + \varrho^2 + \varsigma^2 + \varphi^2 +$$

Math Roman (`\mathrm`)

$$\mathrm{A}^2 + \mathrm{B}^2 + \mathrm{C}^2 + \mathrm{D}^2 + \mathrm{E}^2 + \mathrm{F}^2 + \mathrm{G}^2 + \mathrm{H}^2 + \mathrm{I}^2 + \mathrm{J}^2 + \mathrm{K}^2 + \mathrm{L}^2 + \mathrm{M}^2 +$$
$$\mathrm{N}^2 + \mathrm{O}^2 + \mathrm{P}^2 + \mathrm{Q}^2 + \mathrm{R}^2 + \mathrm{S}^2 + \mathrm{T}^2 + \mathrm{U}^2 + \mathrm{V}^2 + \mathrm{W}^2 + \mathrm{X}^2 + \mathrm{Y}^2 + \mathrm{Z}^2 +$$
$$\mathrm{a}^2 + \mathrm{b}^2 + \mathrm{c}^2 + \mathrm{d}^2 + \mathrm{e}^2 + \mathrm{f}^2 + \mathrm{g}^2 + \mathrm{h}^2 + \mathrm{i}^2 + \mathrm{j}^2 + \mathrm{k}^2 + \mathrm{l}^2 + \mathrm{m}^2 +$$
$$\mathrm{n}^2 + \mathrm{o}^2 + \mathrm{p}^2 + \mathrm{q}^2 + \mathrm{r}^2 + \mathrm{s}^2 + \mathrm{t}^2 + \mathrm{u}^2 + \mathrm{v}^2 + \mathrm{w}^2 + \mathrm{x}^2 + \mathrm{y}^2 + \mathrm{z}^2 +$$
$$\mathrm{A}^2 + \mathrm{B}^2 + \Gamma^2 + \Delta^2 + \mathrm{E}^2 + \mathrm{Z}^2 + \mathrm{H}^2 + \Theta^2 + \mathrm{I}^2 + \mathrm{K}^2 + \Lambda^2 + \mathrm{M}^2 +$$
$$\mathrm{N}^2 + \Xi^2 + \mathrm{O}^2 + \Pi^2 + \mathrm{P}^2 + \Sigma^2 + \mathrm{T}^2 + \Upsilon^2 + \Phi^2 + \mathrm{X}^2 + \Psi^2 + \Omega^2 +$$

Math Bold (`\mathbf`)

$$\boldsymbol{A}^2 + \boldsymbol{B}^2 + \boldsymbol{C}^2 + \boldsymbol{D}^2 + \boldsymbol{E}^2 + \boldsymbol{F}^2 + \boldsymbol{G}^2 + \boldsymbol{H}^2 + \boldsymbol{I}^2 + \boldsymbol{J}^2 + \boldsymbol{K}^2 + \boldsymbol{L}^2 + \boldsymbol{M}^2 +$$
$$\boldsymbol{N}^2 + \boldsymbol{O}^2 + \boldsymbol{P}^2 + \boldsymbol{Q}^2 + \boldsymbol{R}^2 + \boldsymbol{S}^2 + \boldsymbol{T}^2 + \boldsymbol{U}^2 + \boldsymbol{V}^2 + \boldsymbol{W}^2 + \boldsymbol{X}^2 + \boldsymbol{Y}^2 + \boldsymbol{Z}^2 +$$
$$\boldsymbol{a}^2 + \boldsymbol{b}^2 + \boldsymbol{c}^2 + \boldsymbol{d}^2 + \boldsymbol{e}^2 + \boldsymbol{f}^2 + \boldsymbol{g}^2 + \boldsymbol{h}^2 + \boldsymbol{i}^2 + \boldsymbol{j}^2 + \boldsymbol{k}^2 + \boldsymbol{l}^2 + \boldsymbol{m}^2 +$$
$$\boldsymbol{n}^2 + \boldsymbol{o}^2 + \boldsymbol{p}^2 + \boldsymbol{q}^2 + \boldsymbol{r}^2 + \boldsymbol{s}^2 + \boldsymbol{t}^2 + \boldsymbol{u}^2 + \boldsymbol{v}^2 + \boldsymbol{w}^2 + \boldsymbol{x}^2 + \boldsymbol{y}^2 + \boldsymbol{z}^2 +$$
$$\boldsymbol{A}^2 + \boldsymbol{B}^2 + \boldsymbol{\Gamma}^2 + \boldsymbol{\Delta}^2 + \boldsymbol{E}^2 + \boldsymbol{Z}^2 + \boldsymbol{H}^2 + \boldsymbol{\Theta}^2 + \boldsymbol{I}^2 + \boldsymbol{K}^2 + \boldsymbol{\Lambda}^2 + \boldsymbol{M}^2 +$$
$$\boldsymbol{N}^2 + \boldsymbol{\Xi}^2 + \boldsymbol{O}^2 + \boldsymbol{\Pi}^2 + \boldsymbol{P}^2 + \boldsymbol{\Sigma}^2 + \boldsymbol{T}^2 + \boldsymbol{\Upsilon}^2 + \boldsymbol{\Phi}^2 + \boldsymbol{X}^2 + \boldsymbol{\Psi}^2 + \boldsymbol{\Omega}^2 +$$

Math Calligraphic (`\mathcal`)

$$\mathcal{A}^2 + \mathcal{B}^2 + \mathcal{C}^2 + \mathcal{D}^2 + \mathcal{E}^2 + \mathcal{F}^2 + \mathcal{G}^2 + \mathcal{H}^2 + \mathcal{I}^2 + \mathcal{J}^2 + \mathcal{K}^2 + \mathcal{L}^2 + \mathcal{M}^2 +$$
$$\mathcal{N}^2 + \mathcal{O}^2 + \mathcal{P}^2 + \mathcal{Q}^2 + \mathcal{R}^2 + \mathcal{S}^2 + \mathcal{T}^2 + \mathcal{U}^2 + \mathcal{V}^2 + \mathcal{W}^2 + \mathcal{X}^2 + \mathcal{Y}^2 + \mathcal{Z}^2 +$$

3.1.6 Subscript Positioning Serif

Default

$$A_i + B_i + C_i + D_i + E_i + F_i + G_i + H_i + I_i + J_i + K_i + L_i + M_i +$$
$$N_i + O_i + P_i + Q_i + R_i + S_i + T_i + U_i + V_i + W_i + X_i + Y_i + Z_i +$$
$$a_i + b_i + c_i + d_i + e_i + f_i + g_i + h_i + i_i + j_i + k_i + l_i + m_i +$$
$$n_i + o_i + p_i + q_i + r_i + s_i + t_i + u_i + v_i + w_i + x_i + y_i + z_i +$$
$$A_i + B_i + \mathit{\Gamma}_i + \mathit{\Delta}_i + E_i + Z_i + H_i + \mathit{\Theta}_i + I_i + K_i + \mathit{\Lambda}_i + M_i +$$
$$N_i + \mathit{\Xi}_i + O_i + \mathit{\Pi}_i + P_i + \mathit{\Sigma}_i + T_i + \mathit{\Upsilon}_i + \mathit{\Phi}_i + X_i + \mathit{\Psi}_i + \mathit{\Omega}_i +$$
$$\alpha_i + \beta_i + \gamma_i + \delta_i + \epsilon_i + \zeta_i + \eta_i + \theta_i + \iota_i + \kappa_i + \lambda_i + \mu_i +$$
$$\nu_i + \xi_i + o_i + \pi_i + \rho_i + \sigma_i + \tau_i + \upsilon_i + \phi_i + \chi_i + \psi_i + \omega_i +$$
$$\varepsilon_i + \vartheta_i + \varpi_i + \varrho_i + \varsigma_i + \varphi_i +$$

Math Roman (`\mathrm`)

$$\mathrm{A}_i + \mathrm{B}_i + \mathrm{C}_i + \mathrm{D}_i + \mathrm{E}_i + \mathrm{F}_i + \mathrm{G}_i + \mathrm{H}_i + \mathrm{I}_i + \mathrm{J}_i + \mathrm{K}_i + \mathrm{L}_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \mathrm{O}_i + \mathrm{P}_i + \mathrm{Q}_i + \mathrm{R}_i + \mathrm{S}_i + \mathrm{T}_i + \mathrm{U}_i + \mathrm{V}_i + \mathrm{W}_i + \mathrm{X}_i + \mathrm{Y}_i + \mathrm{Z}_i +$$
$$\mathrm{a}_i + \mathrm{b}_i + \mathrm{c}_i + \mathrm{d}_i + \mathrm{e}_i + \mathrm{f}_i + \mathrm{g}_i + \mathrm{h}_i + \mathrm{i}_i + \mathrm{j}_i + \mathrm{k}_i + \mathrm{l}_i + \mathrm{m}_i +$$
$$\mathrm{n}_i + \mathrm{o}_i + \mathrm{p}_i + \mathrm{q}_i + \mathrm{r}_i + \mathrm{s}_i + \mathrm{t}_i + \mathrm{u}_i + \mathrm{v}_i + \mathrm{w}_i + \mathrm{x}_i + \mathrm{y}_i + \mathrm{z}_i +$$
$$\mathrm{A}_i + \mathrm{B}_i + \Gamma_i + \Delta_i + \mathrm{E}_i + \mathrm{Z}_i + \mathrm{H}_i + \Theta_i + \mathrm{I}_i + \mathrm{K}_i + \Lambda_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \Xi_i + \mathrm{O}_i + \Pi_i + \mathrm{P}_i + \Sigma_i + \mathrm{T}_i + \Upsilon_i + \Phi_i + \mathrm{X}_i + \Psi_i + \Omega_i +$$

Math Bold (`\mathbf`)

$$\boldsymbol{A}_i + \boldsymbol{B}_i + \boldsymbol{C}_i + \boldsymbol{D}_i + \boldsymbol{E}_i + \boldsymbol{F}_i + \boldsymbol{G}_i + \boldsymbol{H}_i + \boldsymbol{I}_i + \boldsymbol{J}_i + \boldsymbol{K}_i + \boldsymbol{L}_i + \boldsymbol{M}_i +$$
$$\boldsymbol{N}_i + \boldsymbol{O}_i + \boldsymbol{P}_i + \boldsymbol{Q}_i + \boldsymbol{R}_i + \boldsymbol{S}_i + \boldsymbol{T}_i + \boldsymbol{U}_i + \boldsymbol{V}_i + \boldsymbol{W}_i + \boldsymbol{X}_i + \boldsymbol{Y}_i + \boldsymbol{Z}_i +$$
$$\boldsymbol{a}_i + \boldsymbol{b}_i + \boldsymbol{c}_i + \boldsymbol{d}_i + \boldsymbol{e}_i + \boldsymbol{f}_i + \boldsymbol{g}_i + \boldsymbol{h}_i + \boldsymbol{i}_i + \boldsymbol{j}_i + \boldsymbol{k}_i + \boldsymbol{l}_i + \boldsymbol{m}_i +$$
$$\boldsymbol{n}_i + \boldsymbol{o}_i + \boldsymbol{p}_i + \boldsymbol{q}_i + \boldsymbol{r}_i + \boldsymbol{s}_i + \boldsymbol{t}_i + \boldsymbol{u}_i + \boldsymbol{v}_i + \boldsymbol{w}_i + \boldsymbol{x}_i + \boldsymbol{y}_i + \boldsymbol{z}_i +$$
$$\boldsymbol{A}_i + \boldsymbol{B}_i + \boldsymbol{\mathit{\Gamma}}_i + \boldsymbol{\mathit{\Delta}}_i + \boldsymbol{E}_i + \boldsymbol{Z}_i + \boldsymbol{H}_i + \boldsymbol{\mathit{\Theta}}_i + \boldsymbol{I}_i + \boldsymbol{K}_i + \boldsymbol{\mathit{\Lambda}}_i + \boldsymbol{M}_i +$$
$$\boldsymbol{N}_i + \boldsymbol{\mathit{\Xi}}_i + \boldsymbol{O}_i + \boldsymbol{\mathit{\Pi}}_i + \boldsymbol{P}_i + \boldsymbol{\mathit{\Sigma}}_i + \boldsymbol{T}_i + \boldsymbol{\mathit{\Upsilon}}_i + \boldsymbol{\mathit{\Phi}}_i + \boldsymbol{X}_i + \boldsymbol{\mathit{\Psi}}_i + \boldsymbol{\mathit{\Omega}}_i +$$

Math Calligraphic (`\mathcal`)

$$\mathcal{A}_i + \mathcal{B}_i + \mathcal{C}_i + \mathcal{D}_i + \mathcal{E}_i + \mathcal{F}_i + \mathcal{G}_i + \mathcal{H}_i + \mathcal{I}_i + \mathcal{J}_i + \mathcal{K}_i + \mathcal{L}_i + \mathcal{M}_i +$$
$$\mathcal{N}_i + \mathcal{O}_i + \mathcal{P}_i + \mathcal{Q}_i + \mathcal{R}_i + \mathcal{S}_i + \mathcal{T}_i + \mathcal{U}_i + \mathcal{V}_i + \mathcal{W}_i + \mathcal{X}_i + \mathcal{Y}_i + \mathcal{Z}_i +$$

3.1.7 Accent Positioning Serif

Default

$$
\begin{gathered}
\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} + \\
\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} + \\
\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} + \\
\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{i} + \hat{j} + \hat{k} + \hat{l} + \hat{m} + \\
\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} + \\
\hat{A} + \hat{B} + \hat{\mathit{\Gamma}} + \hat{\mathit{\Delta}} + \hat{E} + \hat{Z} + \hat{H} + \hat{\mathit{\Theta}} + \hat{I} + \hat{K} + \hat{\mathit{\Lambda}} + \hat{M} + \\
\hat{N} + \hat{\mathit{\Xi}} + \hat{O} + \hat{\mathit{\Pi}} + \hat{P} + \hat{\mathit{\Sigma}} + \hat{T} + \hat{\mathit{\Upsilon}} + \hat{\mathit{\Phi}} + \hat{X} + \hat{\mathit{\Psi}} + \hat{\mathit{\Omega}} + \\
\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\iota} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} + \\
\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} + \\
\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +
\end{gathered}
$$

Math Italic (\mathit)

$$
\begin{gathered}
\hat{\mathit{0}} + \hat{\mathit{1}} + \hat{\mathit{2}} + \hat{\mathit{3}} + \hat{\mathit{4}} + \hat{\mathit{5}} + \hat{\mathit{6}} + \hat{\mathit{7}} + \hat{\mathit{8}} + \hat{\mathit{9}} + \\
\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} + \\
\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} + \\
\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{i} + \hat{j} + \hat{k} + \hat{l} + \hat{m} + \hat{\ell} + \hat{\wp} + \hat{\imath} + \hat{\jmath} + \tilde{i} \\
\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} + \\
\hat{A} + \hat{B} + \hat{\ } + \hat{\ } + \hat{E} + \hat{Z} + \hat{H} + \hat{\ } + \hat{I} + \hat{K} + \hat{\ } + \hat{M} + \\
\hat{N} + \hat{\ } + \hat{O} + \hat{\ } + \hat{P} + \hat{\ } + \hat{T} + \hat{\ } + \hat{\ } + \hat{X} + \hat{\ } + \hat{\ } + \\
\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\iota} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} + \\
\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} + \\
\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +
\end{gathered}
$$

Math Roman (\mathrm)

$$
\begin{gathered}
\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} + \\
\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\mathrm{C}} + \hat{\mathrm{D}} + \hat{\mathrm{E}} + \hat{\mathrm{F}} + \hat{\mathrm{G}} + \hat{\mathrm{H}} + \hat{\mathrm{I}} + \hat{\mathrm{J}} + \hat{\mathrm{K}} + \hat{\mathrm{L}} + \hat{\mathrm{M}} + \\
\hat{\mathrm{N}} + \hat{\mathrm{O}} + \hat{\mathrm{P}} + \hat{\mathrm{Q}} + \hat{\mathrm{R}} + \hat{\mathrm{S}} + \hat{\mathrm{T}} + \hat{\mathrm{U}} + \hat{\mathrm{V}} + \hat{\mathrm{W}} + \hat{\mathrm{X}} + \hat{\mathrm{Y}} + \hat{\mathrm{Z}} + \\
\hat{\mathrm{a}} + \hat{\mathrm{b}} + \hat{\mathrm{c}} + \hat{\mathrm{d}} + \hat{\mathrm{e}} + \hat{\mathrm{f}} + \hat{\mathrm{g}} + \hat{\mathrm{h}} + \hat{\mathrm{i}} + \hat{\mathrm{j}} + \hat{\mathrm{k}} + \hat{\mathrm{l}} + \hat{\mathrm{m}} + \\
\hat{\mathrm{n}} + \hat{\mathrm{o}} + \hat{\mathrm{p}} + \hat{\mathrm{q}} + \hat{\mathrm{r}} + \hat{\mathrm{s}} + \hat{\mathrm{t}} + \hat{\mathrm{u}} + \hat{\mathrm{v}} + \hat{\mathrm{w}} + \hat{\mathrm{x}} + \hat{\mathrm{y}} + \hat{\mathrm{z}} + \\
\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\Gamma} + \hat{\Delta} + \hat{\mathrm{E}} + \hat{\mathrm{Z}} + \hat{\mathrm{H}} + \hat{\Theta} + \hat{\mathrm{I}} + \hat{\mathrm{K}} + \hat{\Lambda} + \hat{\mathrm{M}} + \\
\hat{\mathrm{N}} + \hat{\Xi} + \hat{\mathrm{O}} + \hat{\Pi} + \hat{\mathrm{P}} + \hat{\Sigma} + \hat{\mathrm{T}} + \hat{\Upsilon} + \hat{\Phi} + \hat{\mathrm{X}} + \hat{\Psi} + \hat{\Omega} +
\end{gathered}
$$

Math Bold (\mathbf)

$$\hat{\mathbf{0}} + \hat{\mathbf{1}} + \hat{\mathbf{2}} + \hat{\mathbf{3}} + \hat{\mathbf{4}} + \hat{\mathbf{5}} + \hat{\mathbf{6}} + \hat{\mathbf{7}} + \hat{\mathbf{8}} + \hat{\mathbf{9}} +$$
$$\hat{\boldsymbol{A}} + \hat{\boldsymbol{B}} + \hat{\boldsymbol{C}} + \hat{\boldsymbol{D}} + \hat{\boldsymbol{E}} + \hat{\boldsymbol{F}} + \hat{\boldsymbol{G}} + \hat{\boldsymbol{H}} + \hat{\boldsymbol{I}} + \hat{\boldsymbol{J}} + \hat{\boldsymbol{K}} + \hat{\boldsymbol{L}} + \hat{\boldsymbol{M}} +$$
$$\hat{\boldsymbol{N}} + \hat{\boldsymbol{O}} + \hat{\boldsymbol{P}} + \hat{\boldsymbol{Q}} + \hat{\boldsymbol{R}} + \hat{\boldsymbol{S}} + \hat{\boldsymbol{T}} + \hat{\boldsymbol{U}} + \hat{\boldsymbol{V}} + \hat{\boldsymbol{W}} + \hat{\boldsymbol{X}} + \hat{\boldsymbol{Y}} + \hat{\boldsymbol{Z}} +$$
$$\hat{\boldsymbol{a}} + \hat{\boldsymbol{b}} + \hat{\boldsymbol{c}} + \hat{\boldsymbol{d}} + \hat{\boldsymbol{e}} + \hat{\boldsymbol{f}} + \hat{\boldsymbol{g}} + \hat{\boldsymbol{h}} + \hat{\boldsymbol{i}} + \hat{\boldsymbol{j}} + \hat{\boldsymbol{k}} + \hat{\boldsymbol{l}} + \hat{\boldsymbol{m}} +$$
$$\hat{\boldsymbol{n}} + \hat{\boldsymbol{o}} + \hat{\boldsymbol{p}} + \hat{\boldsymbol{q}} + \hat{\boldsymbol{r}} + \hat{\boldsymbol{s}} + \hat{\boldsymbol{t}} + \hat{\boldsymbol{u}} + \hat{\boldsymbol{v}} + \hat{\boldsymbol{w}} + \hat{\boldsymbol{x}} + \hat{\boldsymbol{y}} + \hat{\boldsymbol{z}} +$$
$$\hat{\boldsymbol{A}} + \hat{\boldsymbol{B}} + \hat{\boldsymbol{\varGamma}} + \hat{\boldsymbol{\varDelta}} + \hat{\boldsymbol{E}} + \hat{\boldsymbol{Z}} + \hat{\boldsymbol{H}} + \hat{\boldsymbol{\varTheta}} + \hat{\boldsymbol{I}} + \hat{\boldsymbol{K}} + \hat{\boldsymbol{\varLambda}} + \hat{\boldsymbol{M}} +$$
$$\hat{\boldsymbol{N}} + \hat{\boldsymbol{\varXi}} + \hat{\boldsymbol{O}} + \hat{\boldsymbol{\varPi}} + \hat{\boldsymbol{P}} + \hat{\boldsymbol{\varSigma}} + \hat{\boldsymbol{T}} + \hat{\boldsymbol{\varUpsilon}} + \hat{\boldsymbol{\varPhi}} + \hat{\boldsymbol{X}} + \hat{\boldsymbol{\varPsi}} + \hat{\boldsymbol{\varOmega}} +$$

Math Calligraphic (\mathcal)

$$\hat{\mathcal{A}} + \hat{\mathcal{B}} + \hat{\mathcal{C}} + \hat{\mathcal{D}} + \hat{\mathcal{E}} + \hat{\mathcal{F}} + \hat{\mathcal{G}} + \hat{\mathcal{H}} + \hat{\mathcal{I}} + \hat{\mathcal{J}} + \hat{\mathcal{K}} + \hat{\mathcal{L}} + \hat{\mathcal{M}} +$$
$$\hat{\mathcal{N}} + \hat{\mathcal{O}} + \hat{\mathcal{P}} + \hat{\mathcal{Q}} + \hat{\mathcal{R}} + \hat{\mathcal{S}} + \hat{\mathcal{T}} + \hat{\mathcal{U}} + \hat{\mathcal{V}} + \hat{\mathcal{W}} + \hat{\mathcal{X}} + \hat{\mathcal{Y}} + \hat{\mathcal{Z}} +$$

3.1.8 Differentials Serif

$$dA + dB + dC + dD + dE + dF + dG + dH + dI + dJ + dK + dL + dM +$$
$$dN + dO + dP + dQ + dR + dS + dT + dU + dV + dW + dX + dY + dZ +$$
$$da + db + dc + dd + de + df + dg + dh + di + dj + dk + dl + dm +$$
$$dn + do + dp + dq + dr + ds + dt + du + dv + dw + dx + dy + dz +$$
$$dA + dB + d\varGamma + d\varDelta + dE + dZ + dH + d\varTheta + dI + dK + d\varLambda + dM +$$
$$dN + d\varXi + dO + d\varPi + dP + d\varSigma + dT + d\varUpsilon + d\varPhi + dX + d\varPsi + d\varOmega +$$
$$d\alpha + d\beta + d\gamma + d\delta + d\epsilon + d\zeta + d\eta + d\theta + d\iota + d\kappa + d\lambda + d\mu +$$
$$d\nu + d\xi + do + d\pi + d\rho + d\sigma + d\tau + d\upsilon + d\phi + d\chi + d\psi + d\omega +$$
$$d\varepsilon + d\vartheta + d\varpi + d\varrho + d\varsigma + d\varphi +$$
$$d\mathrm{A} + d\mathrm{B} + d\Gamma + d\Delta + d\mathrm{E} + d\mathrm{Z} + d\mathrm{H} + d\Theta + d\mathrm{I} + d\mathrm{K} + d\Lambda + d\mathrm{M} +$$
$$d\mathrm{N} + d\Xi + d\mathrm{O} + d\Pi + d\mathrm{P} + d\Sigma + d\mathrm{T} + d\Upsilon + d\Phi + d\mathrm{X} + d\Psi + d\Omega +$$

$$
\begin{gathered}
\mathrm{d}A + \mathrm{d}B + \mathrm{d}C + \mathrm{d}D + \mathrm{d}E + \mathrm{d}F + \mathrm{d}G + \mathrm{d}H + \mathrm{d}I + \mathrm{d}J + \mathrm{d}K + \mathrm{d}L + \mathrm{d}M + \\
\mathrm{d}N + \mathrm{d}O + \mathrm{d}P + \mathrm{d}Q + \mathrm{d}R + \mathrm{d}S + \mathrm{d}T + \mathrm{d}U + \mathrm{d}V + \mathrm{d}W + \mathrm{d}X + \mathrm{d}Y + \mathrm{d}Z + \\
\mathrm{d}a + \mathrm{d}b + \mathrm{d}c + \mathrm{d}d + \mathrm{d}e + \mathrm{d}f + \mathrm{d}g + \mathrm{d}h + \mathrm{d}i + \mathrm{d}j + \mathrm{d}k + \mathrm{d}l + \mathrm{d}m + \\
\mathrm{d}n + \mathrm{d}o + \mathrm{d}p + \mathrm{d}q + \mathrm{d}r + \mathrm{d}s + \mathrm{d}t + \mathrm{d}u + \mathrm{d}v + \mathrm{d}w + \mathrm{d}x + \mathrm{d}y + \mathrm{d}z + \\
\mathrm{d}A + \mathrm{d}B + \mathrm{d}\varGamma + \mathrm{d}\varDelta + \mathrm{d}E + \mathrm{d}Z + \mathrm{d}H + \mathrm{d}\varTheta + \mathrm{d}I + \mathrm{d}K + \mathrm{d}\varLambda + \mathrm{d}M + \\
\mathrm{d}N + \mathrm{d}\varXi + \mathrm{d}O + \mathrm{d}\varPi + \mathrm{d}P + \mathrm{d}\varSigma + \mathrm{d}T + \mathrm{d}\varUpsilon + \mathrm{d}\varPhi + \mathrm{d}X + \mathrm{d}\varPsi + \mathrm{d}\varOmega + \\
\mathrm{d}\alpha + \mathrm{d}\beta + \mathrm{d}\gamma + \mathrm{d}\delta + \mathrm{d}\epsilon + \mathrm{d}\zeta + \mathrm{d}\eta + \mathrm{d}\theta + \mathrm{d}\iota + \mathrm{d}\kappa + \mathrm{d}\lambda + \mathrm{d}\mu + \\
\mathrm{d}\nu + \mathrm{d}\xi + \mathrm{d}o + \mathrm{d}\pi + \mathrm{d}\rho + \mathrm{d}\sigma + \mathrm{d}\tau + \mathrm{d}\upsilon + \mathrm{d}\phi + \mathrm{d}\chi + \mathrm{d}\psi + \mathrm{d}\omega + \\
\mathrm{d}\varepsilon + \mathrm{d}\vartheta + \mathrm{d}\varpi + \mathrm{d}\varrho + \mathrm{d}\varsigma + \mathrm{d}\varphi + \\
\mathrm{d}\mathrm{A} + \mathrm{d}\mathrm{B} + \mathrm{d}\Gamma + \mathrm{d}\Delta + \mathrm{d}\mathrm{E} + \mathrm{d}\mathrm{Z} + \mathrm{d}\mathrm{H} + \mathrm{d}\Theta + \mathrm{d}\mathrm{I} + \mathrm{d}\mathrm{K} + \mathrm{d}\Lambda + \mathrm{d}\mathrm{M} + \\
\mathrm{d}\mathrm{N} + \mathrm{d}\Xi + \mathrm{d}\mathrm{O} + \mathrm{d}\Pi + \mathrm{d}\mathrm{P} + \mathrm{d}\Sigma + \mathrm{d}\mathrm{T} + \mathrm{d}\Upsilon + \mathrm{d}\Phi + \mathrm{d}\mathrm{X} + \mathrm{d}\Psi + \mathrm{d}\Omega +
\end{gathered}
$$

$$
\begin{gathered}
\partial A + \partial B + \partial C + \partial D + \partial E + \partial F + \partial G + \partial H + \partial I + \partial J + \partial K + \partial L + \partial M + \\
\partial N + \partial O + \partial P + \partial Q + \partial R + \partial S + \partial T + \partial U + \partial V + \partial W + \partial X + \partial Y + \partial Z + \\
\partial a + \partial b + \partial c + \partial d + \partial e + \partial f + \partial g + \partial h + \partial i + \partial j + \partial k + \partial l + \partial m + \\
\partial n + \partial o + \partial p + \partial q + \partial r + \partial s + \partial t + \partial u + \partial v + \partial w + \partial x + \partial y + \partial z + \\
\partial A + \partial B + \partial \varGamma + \partial \varDelta + \partial E + \partial Z + \partial H + \partial \varTheta + \partial I + \partial K + \partial \varLambda + \partial M + \\
\partial N + \partial \varXi + \partial O + \partial \varPi + \partial P + \partial \varSigma + \partial T + \partial \varUpsilon + \partial \varPhi + \partial X + \partial \varPsi + \partial \varOmega + \\
\partial \alpha + \partial \beta + \partial \gamma + \partial \delta + \partial \epsilon + \partial \zeta + \partial \eta + \partial \theta + \partial \iota + \partial \kappa + \partial \lambda + \partial \mu + \\
\partial \nu + \partial \xi + \partial o + \partial \pi + \partial \rho + \partial \sigma + \partial \tau + \partial \upsilon + \partial \phi + \partial \chi + \partial \psi + \partial \omega + \\
\partial \varepsilon + \partial \vartheta + \partial \varpi + \partial \varrho + \partial \varsigma + \partial \varphi + \\
\partial \mathrm{A} + \partial \mathrm{B} + \partial \Gamma + \partial \Delta + \partial \mathrm{E} + \partial \mathrm{Z} + \partial \mathrm{H} + \partial \Theta + \partial \mathrm{I} + \partial \mathrm{K} + \partial \Lambda + \partial \mathrm{M} + \\
\partial \mathrm{N} + \partial \Xi + \partial \mathrm{O} + \partial \Pi + \partial \mathrm{P} + \partial \Sigma + \partial \mathrm{T} + \partial \Upsilon + \partial \Phi + \partial \mathrm{X} + \partial \Psi + \partial \Omega +
\end{gathered}
$$

3.1.9 Slash Kerning Serif

$$
\begin{gathered}
1/A + 1/B + 1/C + 1/D + 1/E + 1/F + 1/G + 1/H + 1/I + 1/J + 1/K + 1/L + 1/M + \\
1/N + 1/O + 1/P + 1/Q + 1/R + 1/S + 1/T + 1/U + 1/V + 1/W + 1/X + 1/Y + 1/Z + \\
1/a + 1/b + 1/c + 1/d + 1/e + 1/f + 1/g + 1/h + 1/i + 1/j + 1/k + 1/l + 1/m + \\
1/n + 1/o + 1/p + 1/q + 1/r + 1/s + 1/t + 1/u + 1/v + 1/w + 1/x + 1/y + 1/z + \\
1/A + 1/B + 1/\varGamma + 1/\varDelta + 1/E + 1/Z + 1/H + 1/\varTheta + 1/I + 1/K + 1/\varLambda + 1/M + \\
1/N + 1/\varXi + 1/O + 1/\varPi + 1/P + 1/\varSigma + 1/T + 1/\varUpsilon + 1/\varPhi + 1/X + 1/\varPsi + 1/\varOmega + \\
1/\alpha + 1/\beta + 1/\gamma + 1/\delta + 1/\epsilon + 1/\zeta + 1/\eta + 1/\theta + 1/\iota + 1/\kappa + 1/\lambda + 1/\mu + \\
1/\nu + 1/\xi + 1/o + 1/\pi + 1/\rho + 1/\sigma + 1/\tau + 1/\upsilon + 1/\phi + 1/\chi + 1/\psi + 1/\omega + \\
1/\varepsilon + 1/\vartheta + 1/\varpi + 1/\varrho + 1/\varsigma + 1/\varphi +
\end{gathered}
$$

$$A/2+B/2+C/2+D/2+E/2+F/2+G/2+H/2+I/2+J/2+K/2+L/2+M/2+ \\ N/2+O/2+P/2+Q/2+R/2+S/2+T/2+U/2+V/2+W/2+X/2+Y/2+Z/2+ \\ a/2+b/2+c/2+d/2+e/2+f/2+g/2+h/2+i/2+j/2+k/2+l/2+m/2+ \\ n/2+o/2+p/2+q/2+r/2+s/2+t/2+u/2+v/2+w/2+x/2+y/2+z/2+ \\ A/2+B/2+\mathit{\Gamma}/2+\mathit{\Delta}/2+E/2+Z/2+H/2+\mathit{\Theta}/2+I/2+K/2+\mathit{\Lambda}/2+M/2+ \\ N/2+\mathit{\Xi}/2+O/2+\mathit{\Pi}/2+P/2+\mathit{\Sigma}/2+T/2+\mathit{\Upsilon}/2+\mathit{\Phi}/2+X/2+\mathit{\Psi}/2+\mathit{\Omega}/2+ \\ \alpha/2+\beta/2+\gamma/2+\delta/2+\epsilon/2+\zeta/2+\eta/2+\theta/2+\iota/2+\kappa/2+\lambda/2+\mu/2+ \\ \nu/2+\xi/2+o/2+\pi/2+\rho/2+\sigma/2+\tau/2+\upsilon/2+\phi/2+\chi/2+\psi/2+\omega/2+ \\ \varepsilon/2+\vartheta/2+\varpi/2+\varrho/2+\varsigma/2+\varphi/2+$$

3.1.10 (Big) Operators Serif

$\sum_{i=1}^n x^n$ $\prod_{i=1}^n x^n$ $\coprod_{i=1}^n x^n$ $\int_{i=1}^n x^n$ $\oint_{i=1}^n x^n$
$\bigotimes_{i=1}^n x^n$ $\bigoplus_{i=1}^n x^n$ $\bigodot_{i=1}^n x^n$ $\bigwedge_{i=1}^n x^n$ $\bigvee_{i=1}^n x^n$ $\biguplus_{i=1}^n x^n$ $\bigcup_{i=1}^n x^n$ $\bigcap_{i=1}^n x^n$ $\bigsqcup_{i=1}^n x^n$

$$\sum_{i=1}^n x^n \quad \prod_{i=1}^n x^n \quad \coprod_{i=1}^n x^n \quad \int_{i=1}^n x^n \quad \oint_{i=1}^n x^n$$

$$\bigotimes_{i=1}^n x^n \quad \bigoplus_{i=1}^n x^n \quad \bigodot_{i=1}^n x^n \quad \bigwedge_{i=1}^n x^n \quad \bigvee_{i=1}^n x^n \quad \biguplus_{i=1}^n x^n \quad \bigcup_{i=1}^n x^n \quad \bigcap_{i=1}^n x^n \quad \bigsqcup_{i=1}^n x^n$$

3.1.11 Radicals Serif

$$\sqrt{x+y} \quad \sqrt{x^2+y^2} \quad \sqrt{x_i^2+y_j^2} \quad \sqrt{\left(\frac{\cos x}{2}\right)} \quad \sqrt{\left(\frac{\sin x}{2}\right)}$$

$$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{x+y}}}}}}}$$

3.1.12 Over- and Underbraces Serif

$$\overbrace{x} \quad \overbrace{x+y} \quad \overbrace{x^2+y^2} \quad \overbrace{x_i^2+y_j^2} \quad \underbrace{x} \quad \underbrace{x+y} \quad \underbrace{x_i+y_j} \quad \underbrace{x_i^2+y_j^2}$$

3.1.13 Normal and Wide Accents Serif

$$\dot{x} \quad \ddot{x} \quad \vec{x} \quad \bar{x} \quad \overline{x} \quad \overline{xx} \quad \tilde{x} \quad \widetilde{x} \quad \widetilde{xx} \quad \widetilde{xxx} \quad \hat{x} \quad \widehat{x} \quad \widehat{xx} \quad \widehat{xxx}$$

$$\hat{x} \quad \check{x} \quad \tilde{x} \quad \acute{x} \quad \grave{x} \quad \dot{x} \quad \ddot{x} \quad \breve{x} \quad \bar{x} \quad \vec{x}$$

3.1.14 Long Arrows Serif

$$\xleftrightarrow{\hspace{2em}} \quad \leftrightarrow \quad \longleftarrow \quad \longrightarrow \quad \longleftrightarrow \quad \xLeftrightarrow{\hspace{2em}} \quad \Leftrightarrow \quad \Longleftarrow \quad \Longrightarrow \quad \Longleftrightarrow$$

3.1.15 Left and Right Delimiters Serif

$$-(f)--[f]--\lfloor f\rfloor--\lceil f\rceil--\langle f\rangle--\{f\}-$$

Using `\left` and `\right`.

$$-\left(f\right)--\left[f\right]--\left\lfloor f\right\rfloor--\left\lceil f\right\rceil--\left\langle f\right\rangle--\left\{f\right\}-$$

$$-\left)f\right(--\left]f\right[--\left/f\right/--\left\backslash f\right\backslash--\left/f\right\backslash--\left\backslash f\right/-$$

3.1.16 Big-g-g Delimiters Serif

$$-\Biggl\lfloor\biggl\lfloor\Bigl\lfloor\bigl\lfloor\lfloor-\rfloor\bigr\rfloor\Bigr\rfloor\biggr\rfloor\Biggr\rfloor- \quad -\Biggl(\biggl(\Bigl(\bigl((-)\bigr)\Bigr)\biggr)\Biggr)-$$

$$-\Biggl\lceil\biggl\lceil\Bigl\lceil\bigl\lceil\lceil-\rceil\bigr\rceil\Bigr\rceil\biggr\rceil\Biggr\rceil- \quad -\Biggl\{\biggl\{\Bigl\{\bigl\{\{-\}\bigr\}\Bigr\}\biggr\}\Biggr\}-$$

$$-\Biggl[\biggl[\Bigl[\bigl[[-]\bigr]\Bigr]\biggr]\Biggr]- \quad -\Biggl(\biggl(\Bigl(\bigl((-)\bigr)\Bigr)\biggr)\Biggr)-$$

$$-\Biggl\langle\biggl\langle\Bigl\langle\bigl\langle\langle-\rangle\bigr\rangle\Bigr\rangle\biggr\rangle\Biggr\rangle- \quad -\Biggl\lgroup\biggl\lgroup\Bigl\lgroup\bigl\lgroup\lgroup-\rgroup\bigr\rgroup\Bigr\rgroup\biggr\rgroup\Biggr\rgroup-$$

$$-\Biggl\uparrow\biggl\uparrow\Bigl\uparrow\bigl\uparrow\uparrow-\downarrow\bigr\downarrow\Bigr\downarrow\biggr\downarrow\Biggr\downarrow- \quad -\Biggl\Uparrow\biggl\Uparrow\Bigl\Uparrow\bigl\Uparrow\Uparrow-\Downarrow\bigr\Downarrow\Bigr\Downarrow\biggr\Downarrow\Biggr\Downarrow-$$

3.1.17 Binary Operators Serif

$x \pm y$	\pm	$x \cap y$	\cap	$x \diamond y$	\diamond	$x \oplus y$	\oplus
$x \mp y$	\mp	$x \cup y$	\cup	$x \bigtriangleup y$	\bigtriangleup	$x \ominus y$	\ominus
$x \times y$	\times	$x \uplus y$	\uplus	$x \bigtriangledown y$	\bigtriangledown	$x \otimes y$	\otimes
$x \div y$	\div	$x \sqcap y$	\sqcap	$x \triangleleft y$	\triangleleft	$x \oslash y$	\oslash
$x \ast y$	\ast	$x \sqcup y$	\sqcup	$x \triangleright y$	\triangleright	$x \odot y$	\odot
$x \star y$	\star	$x \vee y$	\vee	$x \lhd y$	\lhd	$x \bigcirc y$	\bigcirc
$x \circ y$	\circ	$x \wedge y$	\wedge	$x \rhd y$	\rhd	$x \dagger y$	\dagger
$x \bullet y$	\bullet	$x \setminus y$	\setminus	$x \unlhd y$	\unlhd	$x \ddagger y$	\ddagger
$x \cdot y$	\cdot	$x \wr y$	\wr	$x \unrhd y$	\unrhd	$x \S y$	\S
$x + y$	+	$x - y$	-	$x \amalg y$	\amalg	$x \P y$	\P

3.1.18 Relations Serif

$x \leq y$	\leq	$x \geq y$	\geq	$x \equiv y$	\equiv	$x \models y$	\models
$x \prec y$	\prec	$x \succ y$	\succ	$x \sim y$	\sim	$x \perp y$	\perp
$x \preceq y$	\preceq	$x \succeq y$	\succeq	$x \simeq y$	\simeq	$x \mid y$	\mid
$x \ll y$	\ll	$x \gg y$	\gg	$x \asymp y$	\asymp	$x \parallel y$	\parallel
$x \subset y$	\subset	$x \supset y$	\supset	$x \approx y$	\approx	$x \bowtie y$	\bowtie
$x \subseteq y$	\subseteq	$x \supseteq y$	\supseteq	$x \cong y$	\cong	$x \Join y$	\Join
$x \sqsubset y$	\sqsubset	$x \sqsupset y$	\sqsupset	$x \neq y$	\neq	$x \smile y$	\smile
$x \sqsubseteq y$	\sqsubseteq	$x \sqsupseteq y$	\sqsupseteq	$x \doteq y$	\doteq	$x \frown y$	\frown
$x \in y$	\in	$x \ni y$	\ni	$x \propto y$	\propto	$x = y$	=
$x \vdash y$	\vdash	$x \dashv y$	\dashv	$x < y$	<	$x > y$	>
$x : y$	:						

3.1.19 Punctuation Serif

x, y	,	$x; y$	;	$x \colon y$	\colon	$x.y$	\ldotp	$x \cdotp y$	\cdotp

3.1.20 Arrows Serif

$x \leftarrow y$	`\leftarrow`	$x \longleftarrow y$	`\longleftarrow`	$x \uparrow y$	`\uparrow`
$x \Leftarrow y$	`\Leftarrow`	$x \Longleftarrow y$	`\Longleftarrow`	$x \Uparrow y$	`\Uparrow`
$x \rightarrow y$	`\rightarrow`	$x \longrightarrow y$	`\longrightarrow`	$x \downarrow y$	`\downarrow`
$x \Rightarrow y$	`\Rightarrow`	$x \Longrightarrow y$	`\Longrightarrow`	$x \Downarrow y$	`\Downarrow`
$x \leftrightarrow y$	`\leftrightarrow`	$x \longleftrightarrow y$	`\longleftrightarrow`	$x \updownarrow y$	`\updownarrow`
$x \Leftrightarrow y$	`\Leftrightarrow`	$x \Longleftrightarrow y$	`\Longleftrightarrow`	$x \Updownarrow y$	`\Updownarrow`
$x \mapsto y$	`\mapsto`	$x \longmapsto y$	`\longmapsto`	$x \nearrow y$	`\nearrow`
$x \hookleftarrow y$	`\hookleftarrow`	$x \hookrightarrow y$	`\hookrightarrow`	$x \searrow y$	`\searrow`
$x \leftharpoonup y$	`\leftharpoonup`	$x \rightharpoonup y$	`\rightharpoonup`	$x \swarrow y$	`\swarrow`
$x \leftharpoondown y$	`\leftharpoondown`	$x \rightharpoondown y$	`\rightharpoondown`	$x \nwarrow y$	`\nwarrow`
$x \rightleftharpoons y$	`\rightleftharpoons`	$x \leadsto y$	`\leadsto`		

3.1.21 Miscellaneous Symbols Serif

<table>
<tr><td>$x \ldots y$</td><td><code>\ldots</code></td><td>$x \cdots y$</td><td><code>\cdots</code></td><td>$x \vdots y$</td><td><code>\vdots</code></td><td>$x \ddots y$</td><td><code>\ddots</code></td></tr>
<tr><td>$x \aleph y$</td><td><code>\aleph</code></td><td>$x \prime y$</td><td><code>\prime</code></td><td>$x \forall y$</td><td><code>\forall</code></td><td>$x \infty y$</td><td><code>\infty</code></td></tr>
<tr><td>$x \hbar y$</td><td><code>\hbar</code></td><td>$x \emptyset y$</td><td><code>\emptyset</code></td><td>$x \exists y$</td><td><code>\exists</code></td><td>$x \Box y$</td><td><code>\Box</code></td></tr>
<tr><td>$x \imath y$</td><td><code>\imath</code></td><td>$x \nabla y$</td><td><code>\nabla</code></td><td>$x \neg y$</td><td><code>\neg</code></td><td>$x \Diamond y$</td><td><code>\Diamond</code></td></tr>
<tr><td>$x \jmath y$</td><td><code>\jmath</code></td><td>$x \surd y$</td><td><code>\surd</code></td><td>$x \flat y$</td><td><code>\flat</code></td><td>$x \triangle y$</td><td><code>\triangle</code></td></tr>
<tr><td>$x \ell y$</td><td><code>\ell</code></td><td>$x \top y$</td><td><code>\top</code></td><td>$x \natural y$</td><td><code>\natural</code></td><td>$x \clubsuit y$</td><td><code>\clubsuit</code></td></tr>
<tr><td>$x \wp y$</td><td><code>\wp</code></td><td>$x \bot y$</td><td><code>\bot</code></td><td>$x \sharp y$</td><td><code>\sharp</code></td><td>$x \diamondsuit y$</td><td><code>\diamondsuit</code></td></tr>
<tr><td>$x \Re y$</td><td><code>\Re</code></td><td>$x \| y$</td><td><code>\|</code></td><td>$x \backslash y$</td><td><code>\backslash</code></td><td>$x \heartsuit y$</td><td><code>\heartsuit</code></td></tr>
<tr><td>$x \Im y$</td><td><code>\Im</code></td><td>$x \angle y$</td><td><code>\angle</code></td><td>$x \partial y$</td><td><code>\partial</code></td><td>$x \spadesuit y$</td><td><code>\spadesuit</code></td></tr>
<tr><td>$x \mho y$</td><td><code>\mho</code></td><td>$x . y$</td><td><code>.</code></td><td>$x | y$</td><td><code>|</code></td><td>$x ! y$</td><td><code>!</code></td></tr>
</table>

3.1.22 Variable-Sized Operators Serif

$x \sum y$	`\sum`	$x \bigcap y$	`\bigcap`	$x \bigodot y$	`\bigodot`
$x \prod y$	`\prod`	$x \bigcup y$	`\bigcup`	$x \bigotimes y$	`\bigotimes`
$x \coprod y$	`\coprod`	$x \bigsqcup y$	`\bigsqcup`	$x \bigoplus y$	`\bigoplus`
$x \int y$	`\int`	$x \bigvee y$	`\bigvee`	$x \biguplus y$	`\biguplus`
$x \oint y$	`\oint`	$x \bigwedge y$	`\bigwedge`		

3.1.23 Log-Like Operators Serif

$x \arccos y$	$x \cos y$	$x \csc y$	$x \exp y$	$x \ker y$	$x \limsup y$	$x \min y$	$x \sinh y$
$x \arcsin y$	$x \cosh y$	$x \deg y$	$x \gcd y$	$x \lg y$	$x \ln y$	$x \Pr y$	$x \sup y$
$x \arctan y$	$x \cot y$	$x \det y$	$x \hom y$	$x \lim y$	$x \log y$	$x \sec y$	$x \tan y$
$x \arg y$	$x \coth y$	$x \dim y$	$x \inf y$	$x \liminf y$	$x \max y$	$x \sin y$	$x \tanh y$

3.1.24 Delimiters Serif

<table>
<tr><td>$x(y$</td><td>(</td><td>$x)y$</td><td>)</td><td>$x\uparrow y$</td><td>\uparrow</td><td>$x\Uparrow y$</td><td>\Uparrow</td></tr>
<tr><td>$x[y$</td><td>[</td><td>$x]y$</td><td>]</td><td>$x\downarrow y$</td><td>\downarrow</td><td>$x\Downarrow y$</td><td>\Downarrow</td></tr>
<tr><td>$x\{y$</td><td>\{</td><td>$x\}y$</td><td>\}</td><td>$x\updownarrow y$</td><td>\updownarrow</td><td>$x\Updownarrow y$</td><td>\Updownarrow</td></tr>
<tr><td>$x\lfloor y$</td><td>\lfloor</td><td>$x\rfloor y$</td><td>\rfloor</td><td>$x\lceil y$</td><td>\lceil</td><td>$x\rceil y$</td><td>\rceil</td></tr>
<tr><td>$x\langle y$</td><td>\langle</td><td>$x\rangle y$</td><td>\rangle</td><td>x/y</td><td>/</td><td>$x\backslash y$</td><td>\backslash</td></tr>
<tr><td>$x\vert y$</td><td>|</td><td>$x\Vert y$</td><td>\|</td><td></td><td></td><td></td><td></td></tr>
</table>

3.1.25 Large Delimiters Serif

$\rmoustache$	\rmoustache	$\lmoustache$	\lmoustache	$\rgroup$	\rgroup	$\lgroup$	\lgroup
$\arrowvert$	\arrowvert	$\Arrowvert$	\Arrowvert	$\bracevert$	\bracevert		

3.1.26 Math Mode Accents Serif

$\hat{a}$	\hat{a}	$\acute{a}$	\acute{a}	$\bar{a}$	\bar{a}	$\dot{a}$	\dot{a}	$\breve{a}$	\breve{a}
$\check{a}$	\check{a}	$\grave{a}$	\grave{a}	$\vec{a}$	\vec{a}	$\ddot{a}$	\ddot{a}	$\tilde{a}$	\tilde{a}

3.1.27 Miscellaneous Constructions Serif

$\widetilde{abc}$	\widetilde{abc}	$\widehat{abc}$	\widehat{abc}
$\overleftarrow{abc}$	\overleftarrow{abc}	$\overrightarrow{abc}$	\overrightarrow{abc}
$\overline{abc}$	\overline{abc}	$\underline{abc}$	\underline{abc}
$\overbrace{abc}$	\overbrace{abc}	$\underbrace{abc}$	\underbrace{abc}
$\sqrt{abc}$	\sqrt{abc}	$\sqrt[n]{abc}$	\sqrt[n]{abc}
f'	f'	$\frac{abc}{xyz}$	\frac{abc}{xyz}

3.1.28 AMS Delimiters Serif

$x\ulcorner y$	\ulcorner	$x\urcorner y$	\urcorner	$x\llcorner y$	\llcorner	$x\lrcorner y$	\lrcorner

3.1.29 AMS Arrows Serif

$x \dashrightarrow y$	`\dashrightarrow`	$x \dashleftarrow y$	`\dashleftarrow`
$x \leftleftarrows y$	`\leftleftarrows`	$x \leftrightarrows y$	`\leftrightarrows`
$x \Lleftarrow y$	`\Lleftarrow`	$x \twoheadleftarrow y$	`\twoheadleftarrow`
$x \leftarrowtail y$	`\leftarrowtail`	$x \looparrowleft y$	`\looparrowleft`
$x \leftrightharpoons y$	`\leftrightharpoons`	$x \curvearrowleft y$	`\curvearrowleft`
$x \circlearrowleft y$	`\circlearrowleft`	$x \Lsh y$	`\Lsh`
$x \upuparrows y$	`\upuparrows`	$x \upharpoonleft y$	`\upharpoonleft`
$x \downharpoonleft y$	`\downharpoonleft`	$x \multimap y$	`\multimap`
$x \leftrightsquigarrow y$	`\leftrightsquigarrow`	$x \rightrightarrows y$	`\rightrightarrows`
$x \rightleftarrows y$	`\rightleftarrows`	$x \rightrightarrows y$	`\rightrightarrows`
$x \rightleftarrows y$	`\rightleftarrows`	$x \twoheadrightarrow y$	`\twoheadrightarrow`
$x \rightarrowtail y$	`\rightarrowtail`	$x \looparrowright y$	`\looparrowright`
$x \rightleftharpoons y$	`\rightleftharpoons`	$x \curvearrowright y$	`\curvearrowright`
$x \circlearrowright y$	`\circlearrowright`	$x \Rsh y$	`\Rsh`
$x \downdownarrows y$	`\downdownarrows`	$x \upharpoonright y$	`\upharpoonright`
$x \downharpoonright y$	`\downharpoonright`	$x \rightsquigarrow y$	`\rightsquigarrow`

3.1.30 AMS Negated Arrows Serif

$x \nleftarrow y$	`\nleftarrow`	$x \nrightarrow y$	`\nrightarrow`
$x \nLeftarrow y$	`\nLeftarrow`	$x \nRightarrow y$	`\nRightarrow`
$x \nleftrightarrow y$	`\nleftrightarrow`	$x \nLeftrightarrow y$	`\nLeftrightarrow`

3.1.31 AMS Greek Serif

$x\digamma y$	`\digamma`	$x\varkappa y$	`\varkappa`

3.1.32 AMS Hebrew Serif

$x\beth y$	`\beth`	$x\daleth y$	`\daleth`	$x\gimel y$	`\gimel`

3.1.33 AMS Miscellaneous Serif

$x\hbar y$	`\hbar`	$x\hslash y$	`\hslash`
$x \vartriangle y$	`\vartriangle`	$x\triangledown y$	`\triangledown`
$x\square y$	`\square`	$x\lozenge y$	`\lozenge`
$x\circledS y$	`\circledS`	$x\angle y$	`\angle`
$x\measuredangle y$	`\measuredangle`	$x\nexists y$	`\nexists`
$x\mho y$	`\mho`	$x\Finv y$	`\Finv`^{u}
$x\Game y$	`\Game`^{u}	$x\Bbbk y$	`\Bbbk`^{u}
$x\backprime y$	`\backprime`	$x\varnothing y$	`\varnothing`
$x\blacktriangle y$	`\blacktriangle`	$x\blacktriangledown y$	`\blacktriangledown`
$x\blacksquare y$	`\blacksquare`	$x\blacklozenge y$	`\blacklozenge`
$x\bigstar y$	`\bigstar`	$x\sphericalangle y$	`\sphericalangle`
$x\complement y$	`\complement`	$x\eth y$	`\eth`
$x\diagup y$	`\diagup`^{u}	$x\diagdown y$	`\diagdown`^{u}

^{u} Not defined in `amssymb.sty`, define using the `\newsymbol` command.

3.1.34 AMS Binary Operators Serif

$x \dotplus y$	`\dotplus`	$x \smallsetminus y$	`\smallsetminus`
$x \Cap y$	`\Cap`	$x \Cup y$	`\Cup`
$x \barwedge y$	`\barwedge`	$x \veebar y$	`\veebar`
$x \doublebarwedge y$	`\doublebarwedge`	$x \boxminus y$	`\boxminus`
$x \boxtimes y$	`\boxtimes`	$x \boxdot y$	`\boxdot`
$x \boxplus y$	`\boxplus`	$x \divideontimes y$	`\divideontimes`
$x \ltimes y$	`\ltimes`	$x \rtimes y$	`\rtimes`
$x \leftthreetimes y$	`\leftthreetimes`	$x \rightthreetimes y$	`\rightthreetimes`
$x \curlywedge y$	`\curlywedge`	$x \curlyvee y$	`\curlyvee`
$x \circleddash y$	`\circleddash`	$x \circledast y$	`\circledast`
$x \circledcirc y$	`\circledcirc`	$x \centerdot y$	`\centerdot`
$x \intercal y$	`\intercal`		

3.1.35 AMS Relations Serif

$x \leqslant y$ \leqslant
$x \lesssim y$ \lesssim
$x \approxeq y$ \approxeq
$x \lll y$ \lll
$x \lesseqgtr y$ \lesseqgtr
$x \doteqdot y$ \doteqdot
$x \fallingdotseq y$ \fallingdotseq
$x \backsimeq y$ \backsimeq
$x \Subset y$ \Subset
$x \preccurlyeq y$ \preccurlyeq
$x \precsim y$ \precsim
$x \vartriangleleft y$ \vartriangleleft
$x \vDash y$ \vDash
$x \smallsmile y$ \smallsmile
$x \bumpeq y$ \bumpeq
$x \geqq y$ \geqq
$x \eqslantgtr y$ \eqslantgtr
$x \gtrapprox y$ \gtrapprox
$x \ggg y$ \ggg
$x \gtreqless y$ \gtreqless
$x \eqcirc y$ \eqcirc
$x \triangleq y$ \triangleq
$x \thickapprox y$ \thickapprox
$x \Supset y$ \Supset
$x \succcurlyeq y$ \succcurlyeq
$x \succsim y$ \succsim
$x \vartriangleright y$ \vartriangleright
$x \Vdash y$ \Vdash
$x \shortparallel y$ \shortparallel
$x \pitchfork y$ \pitchfork
$x \blacktriangleleft y$ \blacktriangleleft
$x \backepsilon y$ \backepsilon
$x \because y$ \because

3.1.36 AMS Negated Relations Serif

$x \nless y$	`\nless`	$x \nleq y$	`\nleq`
$x \nleqslant y$	`\nleqslant`	$x \nleqq y$	`\nleqq`
$x \lneq y$	`\lneq`	$x \lneqq y$	`\lneqq`
$x \lvertneqq y$	`\lvertneqq`	$x \lnsim y$	`\lnsim`
$x \lnapprox y$	`\lnapprox`	$x \nprec y$	`\nprec`
$x \npreceq y$	`\npreceq`	$x \precnsim y$	`\precnsim`
$x \precnapprox y$	`\precnapprox`	$x \nsim y$	`\nsim`
$x \nshortmid y$	`\nshortmid`	$x \nmid y$	`\nmid`
$x \nvdash y$	`\nvdash`	$x \nvDash y$	`\nvDash`
$x \ntriangleleft y$	`\ntriangleleft`	$x \ntrianglelefteq y$	`\ntrianglelefteq`
$x \nsubseteq y$	`\nsubseteq`	$x \subsetneq y$	`\subsetneq`
$x \varsubsetneq y$	`\varsubsetneq`	$x \subsetneqq y$	`\subsetneqq`
$x \varsubsetneqq y$	`\varsubsetneqq`	$x \ngtr y$	`\ngtr`
$x \ngeq y$	`\ngeq`	$x \ngeqslant y$	`\ngeqslant`
$x \ngeqq y$	`\ngeqq`	$x \gneq y$	`\gneq`
$x \gneqq y$	`\gneqq`	$x \gvertneqq y$	`\gvertneqq`
$x \gnsim y$	`\gnsim`	$x \gnapprox y$	`\gnapprox`
$x \nsucc y$	`\nsucc`	$x \nsucceq y$	`\nsucceq`
$x \nsucceqq y$	`\nsucceqq`	$x \succnsim y$	`\succnsim`
$x \succnapprox y$	`\succnapprox`	$x \ncong y$	`\ncong`
$x \nshortparallel y$	`\nshortparallel`	$x \nparallel y$	`\nparallel`
$x \nvDash y$	`\nvDash`	$x \nVDash y$	`\nVDash`
$x \ntriangleright y$	`\ntriangleright`	$x \ntrianglerighteq y$	`\ntrianglerighteq`
$x \nsupseteq y$	`\nsupseteq`	$x \nsupseteqq y$	`\nsupseteqq`
$x \supsetneq y$	`\supsetneq`	$x \varsupsetneq y$	`\varsupsetneq`
$x \supsetneqq y$	`\supsetneqq`	$x \varsupsetneqq y$	`\varsupsetneqq`

3.1.37 Math “Torture” Test Serif

Most of the following examples are taken from *The TEXbook* (Knuth, 1984, see https://ctan.org/pkg/texbook) and were adapted for LATEX from Karl Berry’s torture test for plain TEX math fonts.

$x+y-z$, $x+y*z$, $z*y/z$, $(x+y)(x-y)=x^2-y^2$,
$x\times y\cdot z=[x\,y\,z]$, $x\circ y\bullet z$, $x\cup y\cap z$, $x\sqcup y\sqcap z$,
$x\vee y\wedge z$, $x\pm y\mp z$, $x=y/z$, $x:=y$, $x\le y\ne z$, $x\sim y\simeq z$ $x\equiv y\not\equiv z$, $x\subset y\subseteq z$
$\sin 2\theta=2\sin\theta\cos\theta$, $\mathrm{O}(n\log n\log n)$, $\Pr(X>x)=\exp(-x/\mu)$,
$\bigl(x\in A(n)\mid x\in B(n)\bigr)$, $\bigcup_n X_n \parallel \bigcap_n Y_n$
In-text matrices $\left(\begin{smallmatrix}1&1\\0&1\end{smallmatrix}\right)$ and $\left(\begin{smallmatrix}a&b&c\\1&m&n\end{smallmatrix}\right)$.

$$a_0 + \cfrac{1}{a_1 + \cfrac{1}{a_2 + \cfrac{1}{a_3 + \cfrac{1}{a_4}}}}$$

$$\binom{p}{2} x^2 y^{p-2} - \frac{1}{1-x} \frac{1}{1-x^2} = \frac{a+1}{b} \bigg/ \frac{c+1}{d}.$$

$$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}}$$

$$\sqrt[n]{1+\sqrt[k]{1+\sqrt[5]{1+\sqrt[4]{1+\sqrt[3]{1+x}}}}}$$

$$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2}\right) |\varphi(x+\mathrm{i}y)|^2 = 0$$

$$\pi(n) = \sum_{m=2}^{n} \left\lfloor \left(\sum_{k=1}^{m-1} \lfloor (m/k)/\lceil m/k \rceil \rfloor \right)^{-1} \right\rfloor.$$

$$\int_0^\infty \frac{t - \mathrm{i}b}{t^2 + b^2} e^{\mathrm{i}at} \, \mathrm{d}t = e^{ab} E_1(ab), \quad a, b > 0.$$

$$\boldsymbol{A} \coloneqq \begin{pmatrix} x-\lambda & 1 & 0 \\ 0 & x-\lambda & 1 \\ 0 & 0 & x-\lambda \end{pmatrix}.$$

$$\begin{pmatrix} a & b & c \\ d & e & f \end{pmatrix} \begin{pmatrix} u & x \\ v & y \\ w & z \end{pmatrix}$$

$$\boldsymbol{A} = \begin{pmatrix} a_{11} & a_{12} & \ldots & a_{1n} \\ a_{21} & a_{22} & \ldots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \ldots & a_{mn} \end{pmatrix}$$

$$\boldsymbol{M} = \begin{array}{c} \\ C \\ I \\ C' \end{array} \begin{array}{c} \begin{array}{ccc} C & I & C' \end{array} \\ \begin{pmatrix} 1 & 0 & 0 \\ b & 1-b & 0 \\ 0 & a & 1-a \end{pmatrix} \end{array}$$

$$\sum_{n=0}^{\infty} a_n z^n \quad \text{converges if} \quad |z| < \Bigl(\limsup_{n\to\infty} \sqrt[n]{|a_n|} \Bigr)^{-1}.$$

$$\frac{f(x+\Delta x)-f(x)}{\Delta x} \to f'(x) \qquad \text{as } \Delta x \to 0.$$

$$\|u_i\| = 1, \qquad u_i \cdot u_j = 0 \quad \text{if } i \neq j.$$

$$\text{The confluent image of} \quad \left\{ \begin{array}{c} \text{an arc} \\ \text{a circle} \\ \text{a fan} \end{array} \right\} \quad \text{is} \quad \left\{ \begin{array}{c} \text{an arc} \\ \text{an arc or a circle} \\ \text{a fan or an arc} \end{array} \right\}.$$

$$\begin{aligned} T(n) \;\le\; T(2^{\lceil \lg n \rceil}) &\le c(3^{\lceil \lg n \rceil} - 2^{\lceil \lg n \rceil}) \\ &< 3c \cdot 3^{\lg n} \\ &= 3c\,n^{\lg 3}. \end{aligned}$$

$$\begin{aligned} (x+y)(x-y) &= x^2 - xy + yx - y^2 \\ &= x^2 - y^2 \\ (x+y)^2 &= x^2 + 2xy + y^2. \end{aligned}$$

$$\begin{aligned} \left(\int\limits_{-\infty}^{\infty} e^{-x^2}\,dx \right)^2 &= \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)}\,dx\,dy \\ &= \int_0^{2\pi} \int_0^{\infty} e^{-r^2}\,dr\,d\theta \\ &= \int_0^{2\pi} \left(e^{-\frac{r^2}{2}} \Big|_{r=0}^{r=\infty} \right) d\theta \\ &= \pi. \end{aligned}$$

$$\prod_{k \ge 0} \frac{1}{(1-q^k z)} = \sum_{n \ge 0} z^n \Bigg/ \prod_{1 \le k \le n} (1-q^k).$$

$$\sum_{\substack{0<i\le m \\ 0<j\le n}} p(i,j) \neq \sum_{i=1}^{p} \sum_{j=1}^{q} \sum_{k=1}^{r} a_{ij} b_{jk} c_{ki} \neq \sum_{\substack{1\le i\le p \\ 1\le j\le q \\ 1\le k\le r}} a_{ij} b_{jk} c_{ki}$$

$$\max_{1 \le n \le m} \log_2 P_n \quad \text{and} \quad \lim_{x \to 0} \frac{\sin x}{x} = 1$$

Inline math: $\max_{1 \le n \le m} \log_2 P_n$ and $\lim_{x \to 0} \frac{\sin x}{x} = 1$

$$p_1(n) = \lim_{m \to \infty} \sum_{\nu=0}^{\infty} \big(1 - \cos^{2m}(\nu!^n \pi/n)\big)$$

Inline math: $p_1(n) = \lim_{m \to \infty} \sum_{\nu=0}^{\infty} \big(1 - \cos^{2m}(\nu!^n \pi/n)\big)$

3.2 Math Test Serif Bold

3.2.1 Overview Serif Bold

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma;\ \sigma_\epsilon, c^\alpha$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha b}\beta\mathrm{G\Gamma\Gamma P\Pi\Sigma}\sigma$
mathup: $\mathrm{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $a\alpha\alpha b\beta G``P''^{\circ}\sigma$
mathbf: $\boldsymbol{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha b\beta G``P''^{\circ}\sigma}$
mathbfup: $\mathbf{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma;\ \sigma_\epsilon, c^\alpha$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha b}\beta\mathrm{G\Gamma\Gamma P\Pi\Sigma}\sigma$
mathup: $\mathrm{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $a\alpha\alpha b\beta G``P''^{\circ}\sigma$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G``P''^{\circ}\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma;\ \sigma_\varepsilon, c^\alpha$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha b}\beta\mathrm{G\Gamma\Gamma P\Pi\Sigma}\sigma$
mathup: $\mathrm{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma;\ \sigma_\varepsilon, c^\alpha}$
mathnormal: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha b}\beta\mathrm{G\Gamma\Gamma P\Pi\Sigma}\sigma$
mathup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

3.2.2 Formulas Serif Bold

$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega, F,$

$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega, F,$
$\alpha, \beta, \gamma, \delta, \varepsilon, \varepsilon, \zeta, \eta, \theta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \pi, \rho, \rho, \sigma, \varsigma, \tau, \upsilon, \phi, \phi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega, F,$
$\alpha, \beta, \gamma, \delta, \varepsilon, \varepsilon, \zeta, \eta, \theta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \pi, \rho, \rho, \sigma, \varsigma, \tau, \upsilon, \phi, \phi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega, F,$
$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{\nu \to \infty} \nu(\nu) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N\to\infty}\sum_{i=0}^{N} x^i = \min_{x\in\mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x f(x)\,\mathrm{d}x = \left(\frac{27}{2}\right)$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{\nu \to \infty} \nu(\nu) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N\to\infty}\sum_{i=0}^{N} x^i = \min_{x\in\mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x f(x)\,\mathrm{d}x = \left(\frac{27}{2}\right)$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{\nu \to \infty} \nu(\nu) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N\to\infty}\sum_{i=0}^{N} x^i = \min_{x\in\mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x f(x)\,\mathrm{d}x = \left(\frac{27}{2}\right)$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{\nu \to \infty} \nu(\nu) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N\to\infty}\sum_{i=0}^{N} x^i = \min_{x\in\mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x f(x)\,\mathrm{d}x = \binom{27}{2}$$

3.2.3 Math Alphabets Serif Bold

Default

$0, 1, 2, 3, 4, 5, 6, 7, 8, 9,$

$A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,$

$a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,$

$A, B, \mathit{\Gamma}, \mathit{\Delta}, E, Z, H, \mathit{\Theta}, I, K, \mathit{\Lambda}, M, N, \mathit{\Xi}, O, \mathit{\Pi}, P, \mathit{\Sigma}, T, \mathit{\Upsilon}, \mathit{\Phi}, X, \mathit{\Psi}, \mathit{\Omega},$

$\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \vartheta, \varpi, \varrho, \varsigma, \varphi,$

Math Normal (`\mathnormal`)

$\mathnormal{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}$

$\mathnormal{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,}$

$\mathnormal{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,}$

$A, B, \mathit{\Gamma}, \mathit{\Delta}, E, Z, H, \mathit{\Theta}, I, K, \mathit{\Lambda}, M, N, \mathit{\Xi}, O, \mathit{\Pi}, P, \mathit{\Sigma}, T, \mathit{\Upsilon}, \mathit{\Phi}, X, \mathit{\Psi}, \mathit{\Omega},$

$\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \vartheta, \varpi, \varrho, \varsigma, \varphi,$

Math Italic (`\mathit`)

$\mathit{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}$

$\mathit{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,}$

$\mathit{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,}$

A, B, `, ´, E, Z, H, ˆ, I, K, ˜, M, N, ¨, O, ˝, P, ˚, T, ˇ, ˘, X, ¯, ˙,

$\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \vartheta, \varpi, \varrho, \varsigma, \varphi,$

Math Roman (`\mathrm`)

$\mathrm{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}$

$\mathrm{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,}$

$\mathrm{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,}$

$\mathrm{A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega,}$

$\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \vartheta, \varpi, \varrho, \varsigma, \varphi,$

Math Bold (\mathbf)

$$\mathbf{0}, \mathbf{1}, \mathbf{2}, \mathbf{3}, \mathbf{4}, \mathbf{5}, \mathbf{6}, \mathbf{7}, \mathbf{8}, \mathbf{9},$$
$$\boldsymbol{A}, \boldsymbol{B}, \boldsymbol{C}, \boldsymbol{D}, \boldsymbol{E}, \boldsymbol{F}, \boldsymbol{G}, \boldsymbol{H}, \boldsymbol{I}, \boldsymbol{J}, \boldsymbol{K}, \boldsymbol{L}, \boldsymbol{M}, \boldsymbol{N}, \boldsymbol{O}, \boldsymbol{P}, \boldsymbol{Q}, \boldsymbol{R}, \boldsymbol{S}, \boldsymbol{T}, \boldsymbol{U}, \boldsymbol{V}, \boldsymbol{W}, \boldsymbol{X}, \boldsymbol{Y}, \boldsymbol{Z},$$
$$\boldsymbol{a}, \boldsymbol{b}, \boldsymbol{c}, \boldsymbol{d}, \boldsymbol{e}, \boldsymbol{f}, \boldsymbol{g}, \boldsymbol{h}, \boldsymbol{i}, \boldsymbol{j}, \boldsymbol{k}, \boldsymbol{l}, \boldsymbol{m}, \boldsymbol{n}, \boldsymbol{o}, \boldsymbol{p}, \boldsymbol{q}, \boldsymbol{r}, \boldsymbol{s}, \boldsymbol{t}, \boldsymbol{u}, \boldsymbol{v}, \boldsymbol{w}, \boldsymbol{x}, \boldsymbol{y}, \boldsymbol{z},$$
$$\boldsymbol{A}, \boldsymbol{B}, \boldsymbol{\Gamma}, \boldsymbol{\Delta}, \boldsymbol{E}, \boldsymbol{Z}, \boldsymbol{H}, \boldsymbol{\Theta}, \boldsymbol{I}, \boldsymbol{K}, \boldsymbol{\Lambda}, \boldsymbol{M}, \boldsymbol{N}, \boldsymbol{\Xi}, \boldsymbol{O}, \boldsymbol{\Pi}, \boldsymbol{P}, \boldsymbol{\Sigma}, \boldsymbol{T}, \boldsymbol{\Upsilon}, \boldsymbol{\Phi}, \boldsymbol{X}, \boldsymbol{\Psi}, \boldsymbol{\Omega},$$
$$\boldsymbol{\alpha}, \boldsymbol{\beta}, \boldsymbol{\gamma}, \boldsymbol{\delta}, \boldsymbol{\epsilon}, \boldsymbol{\zeta}, \boldsymbol{\eta}, \boldsymbol{\theta}, \boldsymbol{\iota}, \boldsymbol{\kappa}, \boldsymbol{\lambda}, \boldsymbol{\mu}, \boldsymbol{\nu}, \boldsymbol{\xi}, \boldsymbol{o}, \boldsymbol{\pi}, \boldsymbol{\rho}, \boldsymbol{\sigma}, \boldsymbol{\tau}, \boldsymbol{\upsilon}, \boldsymbol{\phi}, \boldsymbol{\chi}, \boldsymbol{\psi}, \boldsymbol{\omega}, \boldsymbol{\varepsilon}, \boldsymbol{\vartheta}, \boldsymbol{\varpi}, \boldsymbol{\varrho}, \boldsymbol{\varsigma}, \boldsymbol{\varphi},$$

Caligraphic (\mathcal)

$$\mathcal{A}, \mathcal{B}, \mathcal{C}, \mathcal{D}, \mathcal{E}, \mathcal{F}, \mathcal{G}, \mathcal{H}, \mathcal{I}, \mathcal{J}, \mathcal{K}, \mathcal{L}, \mathcal{M}, \mathcal{N}, \mathcal{O}, \mathcal{P}, \mathcal{Q}, \mathcal{R}, \mathcal{S}, \mathcal{T}, \mathcal{U}, \mathcal{V}, \mathcal{W}, \mathcal{X}, \mathcal{Y}, \mathcal{Z},$$

Script (\mathscr)

$$\mathscr{A}, \mathscr{B}, \mathscr{C}, \mathscr{D}, \mathscr{E}, \mathscr{F}, \mathscr{G}, \mathscr{H}, \mathscr{I}, \mathscr{J}, \mathscr{K}, \mathscr{L}, \mathscr{M}, \mathscr{N}, \mathscr{O}, \mathscr{P}, \mathscr{Q}, \mathscr{R}, \mathscr{S}, \mathscr{T}, \mathscr{U}, \mathscr{V}, \mathscr{W}, \mathscr{X}, \mathscr{Y}, \mathscr{Z},$$

Fraktur (\mathfrak)

$$\mathfrak{A}, \mathfrak{B}, \mathfrak{C}, \mathfrak{D}, \mathfrak{E}, \mathfrak{F}, \mathfrak{G}, \mathfrak{H}, \mathfrak{I}, \mathfrak{J}, \mathfrak{K}, \mathfrak{L}, \mathfrak{M}, \mathfrak{N}, \mathfrak{O}, \mathfrak{P}, \mathfrak{Q}, \mathfrak{R}, \mathfrak{S}, \mathfrak{T}, \mathfrak{U}, \mathfrak{V}, \mathfrak{W}, \mathfrak{X}, \mathfrak{Y}, \mathfrak{Z},$$
$$\mathfrak{a}, \mathfrak{b}, \mathfrak{c}, \mathfrak{d}, \mathfrak{e}, \mathfrak{f}, \mathfrak{g}, \mathfrak{h}, \mathfrak{i}, \mathfrak{j}, \mathfrak{k}, \mathfrak{l}, \mathfrak{m}, \mathfrak{n}, \mathfrak{o}, \mathfrak{p}, \mathfrak{q}, \mathfrak{r}, \mathfrak{s}, \mathfrak{t}, \mathfrak{u}, \mathfrak{v}, \mathfrak{w}, \mathfrak{x}, \mathfrak{y}, \mathfrak{z},$$

Blackboard Bold (\mathbb)

$$\mathbb{A}, \mathbb{B}, \mathbb{C}, \mathbb{D}, \mathbb{E}, \mathbb{F}, \mathbb{G}, \mathbb{H}, \mathbb{I}, \mathbb{J}, \mathbb{K}, \mathbb{L}, \mathbb{M}, \mathbb{N}, \mathbb{O}, \mathbb{P}, \mathbb{Q}, \mathbb{R}, \mathbb{S}, \mathbb{T}, \mathbb{U}, \mathbb{V}, \mathbb{W}, \mathbb{X}, \mathbb{Y}, \mathbb{Z},$$

3.2.4 Character Sidebearings Serif Bold

Default

$$|A| + |B| + |C| + |D| + |E| + |F| + |G| + |H| + |I| + |J| + |K| + |L| + |M| +$$
$$|N| + |O| + |P| + |Q| + |R| + |S| + |T| + |U| + |V| + |W| + |X| + |Y| + |Z| +$$
$$|a| + |b| + |c| + |d| + |e| + |f| + |g| + |h| + |i| + |j| + |k| + |l| + |m| +$$
$$|n| + |o| + |p| + |q| + |r| + |s| + |t| + |u| + |v| + |w| + |x| + |y| + |z| +$$
$$|A| + |B| + |\Gamma| + |\Delta| + |E| + |Z| + |H| + |\Theta| + |I| + |K| + |\Lambda| + |M| +$$
$$|N| + |\Xi| + |O| + |\Pi| + |P| + |\Sigma| + |T| + |\Upsilon| + |\Phi| + |X| + |\Psi| + |\Omega| +$$
$$|\alpha| + |\beta| + |\gamma| + |\delta| + |\epsilon| + |\zeta| + |\eta| + |\theta| + |\iota| + |\kappa| + |\lambda| + |\mu| +$$
$$|\nu| + |\xi| + |o| + |\pi| + |\rho| + |\sigma| + |\tau| + |\upsilon| + |\phi| + |\chi| + |\psi| + |\omega| +$$
$$|\varepsilon| + |\vartheta| + |\varpi| + |\varrho| + |\varsigma| + |\varphi| +$$

Math Roman (`\mathrm`)

$$|\mathrm{A}| + |\mathrm{B}| + |\mathrm{C}| + |\mathrm{D}| + |\mathrm{E}| + |\mathrm{F}| + |\mathrm{G}| + |\mathrm{H}| + |\mathrm{I}| + |\mathrm{J}| + |\mathrm{K}| + |\mathrm{L}| + |\mathrm{M}| +$$
$$|\mathrm{N}| + |\mathrm{O}| + |\mathrm{P}| + |\mathrm{Q}| + |\mathrm{R}| + |\mathrm{S}| + |\mathrm{T}| + |\mathrm{U}| + |\mathrm{V}| + |\mathrm{W}| + |\mathrm{X}| + |\mathrm{Y}| + |\mathrm{Z}| +$$
$$|\mathrm{a}| + |\mathrm{b}| + |\mathrm{c}| + |\mathrm{d}| + |\mathrm{e}| + |\mathrm{f}| + |\mathrm{g}| + |\mathrm{h}| + |\mathrm{i}| + |\mathrm{j}| + |\mathrm{k}| + |\mathrm{l}| + |\mathrm{m}| +$$
$$|\mathrm{n}| + |\mathrm{o}| + |\mathrm{p}| + |\mathrm{q}| + |\mathrm{r}| + |\mathrm{s}| + |\mathrm{t}| + |\mathrm{u}| + |\mathrm{v}| + |\mathrm{w}| + |\mathrm{x}| + |\mathrm{y}| + |\mathrm{z}| +$$
$$|\mathrm{A}| + |\mathrm{B}| + |\Gamma| + |\Delta| + |\mathrm{E}| + |\mathrm{Z}| + |\mathrm{H}| + |\Theta| + |\mathrm{I}| + |\mathrm{K}| + |\Lambda| + |\mathrm{M}| +$$
$$|\mathrm{N}| + |\Xi| + |\mathrm{O}| + |\Pi| + |\mathrm{P}| + |\Sigma| + |\mathrm{T}| + |\Upsilon| + |\Phi| + |\mathrm{X}| + |\Psi| + |\Omega| +$$

Math Bold (`\mathbf`)

$$|A| + |B| + |C| + |D| + |E| + |F| + |G| + |H| + |I| + |J| + |K| + |L| + |M| +$$
$$|N| + |O| + |P| + |Q| + |R| + |S| + |T| + |U| + |V| + |W| + |X| + |Y| + |Z| +$$
$$|a| + |b| + |c| + |d| + |e| + |f| + |g| + |h| + |i| + |j| + |k| + |l| + |m| +$$
$$|n| + |o| + |p| + |q| + |r| + |s| + |t| + |u| + |v| + |w| + |x| + |y| + |z| +$$
$$|A| + |B| + |\mathit{\Gamma}| + |\mathit{\Delta}| + |E| + |Z| + |H| + |\mathit{\Theta}| + |I| + |K| + |\mathit{\Lambda}| + |M| +$$
$$|N| + |\mathit{\Xi}| + |O| + |\mathit{\Pi}| + |P| + |\mathit{\Sigma}| + |T| + |\mathit{\Upsilon}| + |\mathit{\Phi}| + |X| + |\mathit{\Psi}| + |\mathit{\Omega}| +$$

Math Calligraphic (`\mathcal`)

$$|\mathcal{A}| + |\mathcal{B}| + |\mathcal{C}| + |\mathcal{D}| + |\mathcal{E}| + |\mathcal{F}| + |\mathcal{G}| + |\mathcal{H}| + |\mathcal{I}| + |\mathcal{J}| + |\mathcal{K}| + |\mathcal{L}| + |\mathcal{M}| +$$
$$|\mathcal{N}| + |\mathcal{O}| + |\mathcal{P}| + |\mathcal{Q}| + |\mathcal{R}| + |\mathcal{S}| + |\mathcal{T}| + |\mathcal{U}| + |\mathcal{V}| + |\mathcal{W}| + |\mathcal{X}| + |\mathcal{Y}| + |\mathcal{Z}| +$$

3.2.5 Superscript Positioning Serif Bold

Default

$$A^2 + B^2 + C^2 + D^2 + E^2 + F^2 + G^2 + H^2 + I^2 + J^2 + K^2 + L^2 + M^2 +$$
$$N^2 + O^2 + P^2 + Q^2 + R^2 + S^2 + T^2 + U^2 + V^2 + W^2 + X^2 + Y^2 + Z^2 +$$
$$a^2 + b^2 + c^2 + d^2 + e^2 + f^2 + g^2 + h^2 + i^2 + j^2 + k^2 + l^2 + m^2 +$$
$$n^2 + o^2 + p^2 + q^2 + r^2 + s^2 + t^2 + u^2 + v^2 + w^2 + x^2 + y^2 + z^2 +$$
$$A^2 + B^2 + \mathit{\Gamma}^2 + \mathit{\Delta}^2 + E^2 + Z^2 + H^2 + \mathit{\Theta}^2 + I^2 + K^2 + \mathit{\Lambda}^2 + M^2 +$$
$$N^2 + \mathit{\Xi}^2 + O^2 + \mathit{\Pi}^2 + P^2 + \mathit{\Sigma}^2 + T^2 + \mathit{\Upsilon}^2 + \mathit{\Phi}^2 + X^2 + \mathit{\Psi}^2 + \mathit{\Omega}^2 +$$
$$\alpha^2 + \beta^2 + \gamma^2 + \delta^2 + \epsilon^2 + \zeta^2 + \eta^2 + \theta^2 + \iota^2 + \kappa^2 + \lambda^2 + \mu^2 +$$
$$\nu^2 + \xi^2 + o^2 + \pi^2 + \rho^2 + \sigma^2 + \tau^2 + \upsilon^2 + \phi^2 + \chi^2 + \psi^2 + \omega^2 +$$
$$\varepsilon^2 + \vartheta^2 + \varpi^2 + \varrho^2 + \varsigma^2 + \varphi^2 +$$

Math Roman (\mathrm)

$$\mathrm{A}^2+\mathrm{B}^2+\mathrm{C}^2+\mathrm{D}^2+\mathrm{E}^2+\mathrm{F}^2+\mathrm{G}^2+\mathrm{H}^2+\mathrm{I}^2+\mathrm{J}^2+\mathrm{K}^2+\mathrm{L}^2+\mathrm{M}^2+$$
$$\mathrm{N}^2+\mathrm{O}^2+\mathrm{P}^2+\mathrm{Q}^2+\mathrm{R}^2+\mathrm{S}^2+\mathrm{T}^2+\mathrm{U}^2+\mathrm{V}^2+\mathrm{W}^2+\mathrm{X}^2+\mathrm{Y}^2+\mathrm{Z}^2+$$
$$\mathrm{a}^2+\mathrm{b}^2+\mathrm{c}^2+\mathrm{d}^2+\mathrm{e}^2+\mathrm{f}^2+\mathrm{g}^2+\mathrm{h}^2+\mathrm{i}^2+\mathrm{j}^2+\mathrm{k}^2+\mathrm{l}^2+\mathrm{m}^2+$$
$$\mathrm{n}^2+\mathrm{o}^2+\mathrm{p}^2+\mathrm{q}^2+\mathrm{r}^2+\mathrm{s}^2+\mathrm{t}^2+\mathrm{u}^2+\mathrm{v}^2+\mathrm{w}^2+\mathrm{x}^2+\mathrm{y}^2+\mathrm{z}^2+$$
$$\mathrm{A}^2+\mathrm{B}^2+\Gamma^2+\Delta^2+\mathrm{E}^2+\mathrm{Z}^2+\mathrm{H}^2+\Theta^2+\mathrm{I}^2+\mathrm{K}^2+\Lambda^2+\mathrm{M}^2+$$
$$\mathrm{N}^2+\Xi^2+\mathrm{O}^2+\Pi^2+\mathrm{P}^2+\Sigma^2+\mathrm{T}^2+\Upsilon^2+\Phi^2+\mathrm{X}^2+\Psi^2+\Omega^2+$$

Math Bold (\mathbf)

$$A^2+B^2+C^2+D^2+E^2+F^2+G^2+H^2+I^2+J^2+K^2+L^2+M^2+$$
$$N^2+O^2+P^2+Q^2+R^2+S^2+T^2+U^2+V^2+W^2+X^2+Y^2+Z^2+$$
$$a^2+b^2+c^2+d^2+e^2+f^2+g^2+h^2+i^2+j^2+k^2+l^2+m^2+$$
$$n^2+o^2+p^2+q^2+r^2+s^2+t^2+u^2+v^2+w^2+x^2+y^2+z^2+$$
$$A^2+B^2+\mathit{\Gamma}^2+\mathit{\Delta}^2+E^2+Z^2+H^2+\mathit{\Theta}^2+I^2+K^2+\mathit{\Lambda}^2+M^2+$$
$$N^2+\mathit{\Xi}^2+O^2+\mathit{\Pi}^2+P^2+\mathit{\Sigma}^2+T^2+\mathit{\Upsilon}^2+\mathit{\Phi}^2+X^2+\mathit{\Psi}^2+\mathit{\Omega}^2+$$

Math Calligraphic (\mathcal)

$$\mathcal{A}^2+\mathcal{B}^2+\mathcal{C}^2+\mathcal{D}^2+\mathcal{E}^2+\mathcal{F}^2+\mathcal{G}^2+\mathcal{H}^2+\mathcal{I}^2+\mathcal{J}^2+\mathcal{K}^2+\mathcal{L}^2+\mathcal{M}^2+$$
$$\mathcal{N}^2+\mathcal{O}^2+\mathcal{P}^2+\mathcal{Q}^2+\mathcal{R}^2+\mathcal{S}^2+\mathcal{T}^2+\mathcal{U}^2+\mathcal{V}^2+\mathcal{W}^2+\mathcal{X}^2+\mathcal{Y}^2+\mathcal{Z}^2+$$

3.2.6 Subscript Positioning Serif Bold

Default

$$A_i+B_i+C_i+D_i+E_i+F_i+G_i+H_i+I_i+J_i+K_i+L_i+M_i+$$
$$N_i+O_i+P_i+Q_i+R_i+S_i+T_i+U_i+V_i+W_i+X_i+Y_i+Z_i+$$
$$a_i+b_i+c_i+d_i+e_i+f_i+g_i+h_i+i_i+j_i+k_i+l_i+m_i+$$
$$n_i+o_i+p_i+q_i+r_i+s_i+t_i+u_i+v_i+w_i+x_i+y_i+z_i+$$
$$A_i+B_i+\mathit{\Gamma}_i+\mathit{\Delta}_i+E_i+Z_i+H_i+\mathit{\Theta}_i+I_i+K_i+\mathit{\Lambda}_i+M_i+$$
$$N_i+\mathit{\Xi}_i+O_i+\mathit{\Pi}_i+P_i+\mathit{\Sigma}_i+T_i+\mathit{\Upsilon}_i+\mathit{\Phi}_i+X_i+\mathit{\Psi}_i+\mathit{\Omega}_i+$$
$$\alpha_i+\beta_i+\gamma_i+\delta_i+\epsilon_i+\zeta_i+\eta_i+\theta_i+\iota_i+\kappa_i+\lambda_i+\mu_i+$$
$$\nu_i+\xi_i+o_i+\pi_i+\rho_i+\sigma_i+\tau_i+\upsilon_i+\phi_i+\chi_i+\psi_i+\omega_i+$$
$$\varepsilon_i+\vartheta_i+\varpi_i+\varrho_i+\varsigma_i+\varphi_i+$$

Math Roman (\mathrm)

$$\mathrm{A}_i + \mathrm{B}_i + \mathrm{C}_i + \mathrm{D}_i + \mathrm{E}_i + \mathrm{F}_i + \mathrm{G}_i + \mathrm{H}_i + \mathrm{I}_i + \mathrm{J}_i + \mathrm{K}_i + \mathrm{L}_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \mathrm{O}_i + \mathrm{P}_i + \mathrm{Q}_i + \mathrm{R}_i + \mathrm{S}_i + \mathrm{T}_i + \mathrm{U}_i + \mathrm{V}_i + \mathrm{W}_i + \mathrm{X}_i + \mathrm{Y}_i + \mathrm{Z}_i +$$
$$\mathrm{a}_i + \mathrm{b}_i + \mathrm{c}_i + \mathrm{d}_i + \mathrm{e}_i + \mathrm{f}_i + \mathrm{g}_i + \mathrm{h}_i + \mathrm{i}_i + \mathrm{j}_i + \mathrm{k}_i + \mathrm{l}_i + \mathrm{m}_i +$$
$$\mathrm{n}_i + \mathrm{o}_i + \mathrm{p}_i + \mathrm{q}_i + \mathrm{r}_i + \mathrm{s}_i + \mathrm{t}_i + \mathrm{u}_i + \mathrm{v}_i + \mathrm{w}_i + \mathrm{x}_i + \mathrm{y}_i + \mathrm{z}_i +$$
$$\mathrm{A}_i + \mathrm{B}_i + \Gamma_i + \Delta_i + \mathrm{E}_i + \mathrm{Z}_i + \mathrm{H}_i + \Theta_i + \mathrm{I}_i + \mathrm{K}_i + \Lambda_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \Xi_i + \mathrm{O}_i + \Pi_i + \mathrm{P}_i + \Sigma_i + \mathrm{T}_i + \Upsilon_i + \Phi_i + \mathrm{X}_i + \Psi_i + \Omega_i +$$

Math Bold (\mathbf)

$$A_i + B_i + C_i + D_i + E_i + F_i + G_i + H_i + I_i + J_i + K_i + L_i + M_i +$$
$$N_i + O_i + P_i + Q_i + R_i + S_i + T_i + U_i + V_i + W_i + X_i + Y_i + Z_i +$$
$$a_i + b_i + c_i + d_i + e_i + f_i + g_i + h_i + i_i + j_i + k_i + l_i + m_i +$$
$$n_i + o_i + p_i + q_i + r_i + s_i + t_i + u_i + v_i + w_i + x_i + y_i + z_i +$$
$$A_i + B_i + \mathit{\Gamma}_i + \mathit{\Delta}_i + E_i + Z_i + H_i + \mathit{\Theta}_i + I_i + K_i + \mathit{\Lambda}_i + M_i +$$
$$N_i + \mathit{\Xi}_i + O_i + \mathit{\Pi}_i + P_i + \mathit{\Sigma}_i + T_i + \mathit{\Upsilon}_i + \mathit{\Phi}_i + X_i + \mathit{\Psi}_i + \mathit{\Omega}_i +$$

Math Calligraphic (\mathcal)

$$\mathcal{A}_i + \mathcal{B}_i + \mathcal{C}_i + \mathcal{D}_i + \mathcal{E}_i + \mathcal{F}_i + \mathcal{G}_i + \mathcal{H}_i + \mathcal{I}_i + \mathcal{J}_i + \mathcal{K}_i + \mathcal{L}_i + \mathcal{M}_i +$$
$$\mathcal{N}_i + \mathcal{O}_i + \mathcal{P}_i + \mathcal{Q}_i + \mathcal{R}_i + \mathcal{S}_i + \mathcal{T}_i + \mathcal{U}_i + \mathcal{V}_i + \mathcal{W}_i + \mathcal{X}_i + \mathcal{Y}_i + \mathcal{Z}_i +$$

3.2.7 Accent Positioning Serif Bold

Default

$$\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} +$$
$$\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} +$$
$$\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} +$$
$$\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{\imath} + \hat{\jmath} + \hat{k} + \hat{l} + \hat{m} +$$
$$\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} +$$
$$\hat{A} + \hat{B} + \hat{\mathit{\Gamma}} + \hat{\mathit{\Delta}} + \hat{E} + \hat{Z} + \hat{H} + \hat{\mathit{\Theta}} + \hat{I} + \hat{K} + \hat{\mathit{\Lambda}} + \hat{M} +$$
$$\hat{N} + \hat{\mathit{\Xi}} + \hat{O} + \hat{\mathit{\Pi}} + \hat{P} + \hat{\mathit{\Sigma}} + \hat{T} + \hat{\mathit{\Upsilon}} + \hat{\mathit{\Phi}} + \hat{X} + \hat{\mathit{\Psi}} + \hat{\mathit{\Omega}} +$$
$$\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\iota} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} +$$
$$\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} +$$
$$\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +$$

Math Italic (`\mathit`)

$$\hat{\mathit{0}} + \hat{\mathit{1}} + \hat{\mathit{2}} + \hat{\mathit{3}} + \hat{\mathit{4}} + \hat{\mathit{5}} + \hat{\mathit{6}} + \hat{\mathit{7}} + \hat{\mathit{8}} + \hat{\mathit{9}} +$$
$$\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} +$$
$$\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} +$$
$$\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{i} + \hat{j} + \hat{k} + \hat{l} + \hat{m} + \hat{\ell} + \hat{\wp} + \hat{\imath} + \hat{\jmath} + \tilde{i}$$
$$\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} +$$
$$\hat{A} + \hat{B} + \hat{} + \hat{} + \hat{E} + \hat{Z} + \hat{H} + \hat{} + \hat{I} + \hat{K} + \hat{} + \hat{M} +$$
$$\hat{N} + \hat{} + \hat{O} + \hat{} + \hat{P} + \hat{} + \hat{T} + \hat{} + \hat{} + \hat{X} + \hat{} + \hat{} +$$
$$\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\iota} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} +$$
$$\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} +$$
$$\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +$$

Math Roman (`\mathrm`)

$$\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} +$$
$$\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\mathrm{C}} + \hat{\mathrm{D}} + \hat{\mathrm{E}} + \hat{\mathrm{F}} + \hat{\mathrm{G}} + \hat{\mathrm{H}} + \hat{\mathrm{I}} + \hat{\mathrm{J}} + \hat{\mathrm{K}} + \hat{\mathrm{L}} + \hat{\mathrm{M}} +$$
$$\hat{\mathrm{N}} + \hat{\mathrm{O}} + \hat{\mathrm{P}} + \hat{\mathrm{Q}} + \hat{\mathrm{R}} + \hat{\mathrm{S}} + \hat{\mathrm{T}} + \hat{\mathrm{U}} + \hat{\mathrm{V}} + \hat{\mathrm{W}} + \hat{\mathrm{X}} + \hat{\mathrm{Y}} + \hat{\mathrm{Z}} +$$
$$\hat{\mathrm{a}} + \hat{\mathrm{b}} + \hat{\mathrm{c}} + \hat{\mathrm{d}} + \hat{\mathrm{e}} + \hat{\mathrm{f}} + \hat{\mathrm{g}} + \hat{\mathrm{h}} + \hat{\mathrm{i}} + \hat{\mathrm{j}} + \hat{\mathrm{k}} + \hat{\mathrm{l}} + \hat{\mathrm{m}} +$$
$$\hat{\mathrm{n}} + \hat{\mathrm{o}} + \hat{\mathrm{p}} + \hat{\mathrm{q}} + \hat{\mathrm{r}} + \hat{\mathrm{s}} + \hat{\mathrm{t}} + \hat{\mathrm{u}} + \hat{\mathrm{v}} + \hat{\mathrm{w}} + \hat{\mathrm{x}} + \hat{\mathrm{y}} + \hat{\mathrm{z}} +$$
$$\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\mathrm{\Gamma}} + \hat{\mathrm{\Delta}} + \hat{\mathrm{E}} + \hat{\mathrm{Z}} + \hat{\mathrm{H}} + \hat{\mathrm{\Theta}} + \hat{\mathrm{I}} + \hat{\mathrm{K}} + \hat{\mathrm{\Lambda}} + \hat{\mathrm{M}} +$$
$$\hat{\mathrm{N}} + \hat{\mathrm{\Xi}} + \hat{\mathrm{O}} + \hat{\mathrm{\Pi}} + \hat{\mathrm{P}} + \hat{\mathrm{\Sigma}} + \hat{\mathrm{T}} + \hat{\mathrm{\Upsilon}} + \hat{\mathrm{\Phi}} + \hat{\mathrm{X}} + \hat{\mathrm{\Psi}} + \hat{\mathrm{\Omega}} +$$

Math Bold (`\mathbf`)

$$\hat{\mathbf{0}} + \hat{\mathbf{1}} + \hat{\mathbf{2}} + \hat{\mathbf{3}} + \hat{\mathbf{4}} + \hat{\mathbf{5}} + \hat{\mathbf{6}} + \hat{\mathbf{7}} + \hat{\mathbf{8}} + \hat{\mathbf{9}} +$$
$$\hat{\mathbf{A}} + \hat{\mathbf{B}} + \hat{\mathbf{C}} + \hat{\mathbf{D}} + \hat{\mathbf{E}} + \hat{\mathbf{F}} + \hat{\mathbf{G}} + \hat{\mathbf{H}} + \hat{\mathbf{I}} + \hat{\mathbf{J}} + \hat{\mathbf{K}} + \hat{\mathbf{L}} + \hat{\mathbf{M}} +$$
$$\hat{\mathbf{N}} + \hat{\mathbf{O}} + \hat{\mathbf{P}} + \hat{\mathbf{Q}} + \hat{\mathbf{R}} + \hat{\mathbf{S}} + \hat{\mathbf{T}} + \hat{\mathbf{U}} + \hat{\mathbf{V}} + \hat{\mathbf{W}} + \hat{\mathbf{X}} + \hat{\mathbf{Y}} + \hat{\mathbf{Z}} +$$
$$\hat{\mathbf{a}} + \hat{\mathbf{b}} + \hat{\mathbf{c}} + \hat{\mathbf{d}} + \hat{\mathbf{e}} + \hat{\mathbf{f}} + \hat{\mathbf{g}} + \hat{\mathbf{h}} + \hat{\mathbf{i}} + \hat{\mathbf{j}} + \hat{\mathbf{k}} + \hat{\mathbf{l}} + \hat{\mathbf{m}} +$$
$$\hat{\mathbf{n}} + \hat{\mathbf{o}} + \hat{\mathbf{p}} + \hat{\mathbf{q}} + \hat{\mathbf{r}} + \hat{\mathbf{s}} + \hat{\mathbf{t}} + \hat{\mathbf{u}} + \hat{\mathbf{v}} + \hat{\mathbf{w}} + \hat{\mathbf{x}} + \hat{\mathbf{y}} + \hat{\mathbf{z}} +$$
$$\hat{\mathbf{A}} + \hat{\mathbf{B}} + \hat{\mathbf{\Gamma}} + \hat{\mathbf{\Delta}} + \hat{\mathbf{E}} + \hat{\mathbf{Z}} + \hat{\mathbf{H}} + \hat{\mathbf{\Theta}} + \hat{\mathbf{I}} + \hat{\mathbf{K}} + \hat{\mathbf{\Lambda}} + \hat{\mathbf{M}} +$$
$$\hat{\mathbf{N}} + \hat{\mathbf{\Xi}} + \hat{\mathbf{O}} + \hat{\mathbf{\Pi}} + \hat{\mathbf{P}} + \hat{\mathbf{\Sigma}} + \hat{\mathbf{T}} + \hat{\mathbf{\Upsilon}} + \hat{\mathbf{\Phi}} + \hat{\mathbf{X}} + \hat{\mathbf{\Psi}} + \hat{\mathbf{\Omega}} +$$

Math Calligraphic (`\mathcal`)

$$\hat{\mathcal{A}} + \hat{\mathcal{B}} + \hat{\mathcal{C}} + \hat{\mathcal{D}} + \hat{\mathcal{E}} + \hat{\mathcal{F}} + \hat{\mathcal{G}} + \hat{\mathcal{H}} + \hat{\mathcal{I}} + \hat{\mathcal{J}} + \hat{\mathcal{K}} + \hat{\mathcal{L}} + \hat{\mathcal{M}} +$$
$$\hat{\mathcal{N}} + \hat{\mathcal{O}} + \hat{\mathcal{P}} + \hat{\mathcal{Q}} + \hat{\mathcal{R}} + \hat{\mathcal{S}} + \hat{\mathcal{T}} + \hat{\mathcal{U}} + \hat{\mathcal{V}} + \hat{\mathcal{W}} + \hat{\mathcal{X}} + \hat{\mathcal{Y}} + \hat{\mathcal{Z}} +$$

3.2.8 Differentials Serif Bold

$$\boldsymbol{\begin{gathered}dA + dB + dC + dD + dE + dF + dG + dH + dI + dJ + dK + dL + dM + \\ dN + dO + dP + dQ + dR + dS + dT + dU + dV + dW + dX + dY + dZ + \\ da + db + dc + dd + de + df + dg + dh + di + dj + dk + dl + dm + \\ dn + do + dp + dq + dr + ds + dt + du + dv + dw + dx + dy + dz + \\ dA + dB + d\varGamma + d\varDelta + dE + dZ + dH + d\varTheta + dI + dK + d\varLambda + dM + \\ dN + d\varXi + dO + d\varPi + dP + d\varSigma + dT + d\varUpsilon + d\varPhi + dX + d\varPsi + d\varOmega + \\ d\alpha + d\beta + d\gamma + d\delta + d\epsilon + d\zeta + d\eta + d\theta + d\iota + d\kappa + d\lambda + d\mu + \\ d\nu + d\xi + do + d\pi + d\rho + d\sigma + d\tau + d\upsilon + d\phi + d\chi + d\psi + d\omega + \\ d\varepsilon + d\vartheta + d\varpi + d\varrho + d\varsigma + d\varphi + \\ d\mathrm{A} + d\mathrm{B} + d\Gamma + d\Delta + d\mathrm{E} + d\mathrm{Z} + d\mathrm{H} + d\Theta + d\mathrm{I} + d\mathrm{K} + d\Lambda + d\mathrm{M} + \\ d\mathrm{N} + d\Xi + d\mathrm{O} + d\Pi + d\mathrm{P} + d\Sigma + d\mathrm{T} + d\Upsilon + d\Phi + d\mathrm{X} + d\Psi + d\Omega +\end{gathered}}$$

$$\boldsymbol{\begin{gathered}\mathrm{d}A + \mathrm{d}B + \mathrm{d}C + \mathrm{d}D + \mathrm{d}E + \mathrm{d}F + \mathrm{d}G + \mathrm{d}H + \mathrm{d}I + \mathrm{d}J + \mathrm{d}K + \mathrm{d}L + \mathrm{d}M + \\ \mathrm{d}N + \mathrm{d}O + \mathrm{d}P + \mathrm{d}Q + \mathrm{d}R + \mathrm{d}S + \mathrm{d}T + \mathrm{d}U + \mathrm{d}V + \mathrm{d}W + \mathrm{d}X + \mathrm{d}Y + \mathrm{d}Z + \\ \mathrm{d}a + \mathrm{d}b + \mathrm{d}c + \mathrm{d}d + \mathrm{d}e + \mathrm{d}f + \mathrm{d}g + \mathrm{d}h + \mathrm{d}i + \mathrm{d}j + \mathrm{d}k + \mathrm{d}l + \mathrm{d}m + \\ \mathrm{d}n + \mathrm{d}o + \mathrm{d}p + \mathrm{d}q + \mathrm{d}r + \mathrm{d}s + \mathrm{d}t + \mathrm{d}u + \mathrm{d}v + \mathrm{d}w + \mathrm{d}x + \mathrm{d}y + \mathrm{d}z + \\ \mathrm{d}A + \mathrm{d}B + \mathrm{d}\varGamma + \mathrm{d}\varDelta + \mathrm{d}E + \mathrm{d}Z + \mathrm{d}H + \mathrm{d}\varTheta + \mathrm{d}I + \mathrm{d}K + \mathrm{d}\varLambda + \mathrm{d}M + \\ \mathrm{d}N + \mathrm{d}\varXi + \mathrm{d}O + \mathrm{d}\varPi + \mathrm{d}P + \mathrm{d}\varSigma + \mathrm{d}T + \mathrm{d}\varUpsilon + \mathrm{d}\varPhi + \mathrm{d}X + \mathrm{d}\varPsi + \mathrm{d}\varOmega + \\ \mathrm{d}\alpha + \mathrm{d}\beta + \mathrm{d}\gamma + \mathrm{d}\delta + \mathrm{d}\epsilon + \mathrm{d}\zeta + \mathrm{d}\eta + \mathrm{d}\theta + \mathrm{d}\iota + \mathrm{d}\kappa + \mathrm{d}\lambda + \mathrm{d}\mu + \\ \mathrm{d}\nu + \mathrm{d}\xi + \mathrm{d}o + \mathrm{d}\pi + \mathrm{d}\rho + \mathrm{d}\sigma + \mathrm{d}\tau + \mathrm{d}\upsilon + \mathrm{d}\phi + \mathrm{d}\chi + \mathrm{d}\psi + \mathrm{d}\omega + \\ \mathrm{d}\varepsilon + \mathrm{d}\vartheta + \mathrm{d}\varpi + \mathrm{d}\varrho + \mathrm{d}\varsigma + \mathrm{d}\varphi + \\ \mathrm{dA} + \mathrm{dB} + \mathrm{d}\Gamma + \mathrm{d}\Delta + \mathrm{dE} + \mathrm{dZ} + \mathrm{dH} + \mathrm{d}\Theta + \mathrm{dI} + \mathrm{dK} + \mathrm{d}\Lambda + \mathrm{dM} + \\ \mathrm{dN} + \mathrm{d}\Xi + \mathrm{dO} + \mathrm{d}\Pi + \mathrm{dP} + \mathrm{d}\Sigma + \mathrm{dT} + \mathrm{d}\Upsilon + \mathrm{d}\Phi + \mathrm{dX} + \mathrm{d}\Psi + \mathrm{d}\Omega +\end{gathered}}$$

$$\partial A + \partial B + \partial C + \partial D + \partial E + \partial F + \partial G + \partial H + \partial I + \partial J + \partial K + \partial L + \partial M +$$
$$\partial N + \partial O + \partial P + \partial Q + \partial R + \partial S + \partial T + \partial U + \partial V + \partial W + \partial X + \partial Y + \partial Z +$$
$$\partial a + \partial b + \partial c + \partial d + \partial e + \partial f + \partial g + \partial h + \partial i + \partial j + \partial k + \partial l + \partial m +$$
$$\partial n + \partial o + \partial p + \partial q + \partial r + \partial s + \partial t + \partial u + \partial v + \partial w + \partial x + \partial y + \partial z +$$
$$\partial A + \partial B + \partial \mathit{\Gamma} + \partial \mathit{\Delta} + \partial E + \partial Z + \partial H + \partial \mathit{\Theta} + \partial I + \partial K + \partial \mathit{\Lambda} + \partial M +$$
$$\partial N + \partial \mathit{\Xi} + \partial O + \partial \mathit{\Pi} + \partial P + \partial \mathit{\Sigma} + \partial T + \partial \mathit{\Upsilon} + \partial \mathit{\Phi} + \partial X + \partial \mathit{\Psi} + \partial \mathit{\Omega} +$$
$$\partial \alpha + \partial \beta + \partial \gamma + \partial \delta + \partial \epsilon + \partial \zeta + \partial \eta + \partial \theta + \partial \iota + \partial \kappa + \partial \lambda + \partial \mu +$$
$$\partial \nu + \partial \xi + \partial o + \partial \pi + \partial \rho + \partial \sigma + \partial \tau + \partial \upsilon + \partial \phi + \partial \chi + \partial \psi + \partial \omega +$$
$$\partial \varepsilon + \partial \vartheta + \partial \varpi + \partial \varrho + \partial \varsigma + \partial \varphi +$$
$$\partial \mathrm{A} + \partial \mathrm{B} + \partial \Gamma + \partial \Delta + \partial \mathrm{E} + \partial \mathrm{Z} + \partial \mathrm{H} + \partial \Theta + \partial \mathrm{I} + \partial \mathrm{K} + \partial \Lambda + \partial \mathrm{M} +$$
$$\partial \mathrm{N} + \partial \Xi + \partial \mathrm{O} + \partial \Pi + \partial \mathrm{P} + \partial \Sigma + \partial \mathrm{T} + \partial \Upsilon + \partial \Phi + \partial \mathrm{X} + \partial \Psi + \partial \Omega +$$

3.2.9 Slash Kerning Serif Bold

$$1/A + 1/B + 1/C + 1/D + 1/E + 1/F + 1/G + 1/H + 1/I + 1/J + 1/K + 1/L + 1/M +$$
$$1/N + 1/O + 1/P + 1/Q + 1/R + 1/S + 1/T + 1/U + 1/V + 1/W + 1/X + 1/Y + 1/Z +$$
$$1/a + 1/b + 1/c + 1/d + 1/e + 1/f + 1/g + 1/h + 1/i + 1/j + 1/k + 1/l + 1/m +$$
$$1/n + 1/o + 1/p + 1/q + 1/r + 1/s + 1/t + 1/u + 1/v + 1/w + 1/x + 1/y + 1/z +$$
$$1/A + 1/B + 1/\mathit{\Gamma} + 1/\mathit{\Delta} + 1/E + 1/Z + 1/H + 1/\mathit{\Theta} + 1/I + 1/K + 1/\mathit{\Lambda} + 1/M +$$
$$1/N + 1/\mathit{\Xi} + 1/O + 1/\mathit{\Pi} + 1/P + 1/\mathit{\Sigma} + 1/T + 1/\mathit{\Upsilon} + 1/\mathit{\Phi} + 1/X + 1/\mathit{\Psi} + 1/\mathit{\Omega} +$$
$$1/\alpha + 1/\beta + 1/\gamma + 1/\delta + 1/\epsilon + 1/\zeta + 1/\eta + 1/\theta + 1/\iota + 1/\kappa + 1/\lambda + 1/\mu +$$
$$1/\nu + 1/\xi + 1/o + 1/\pi + 1/\rho + 1/\sigma + 1/\tau + 1/\upsilon + 1/\phi + 1/\chi + 1/\psi + 1/\omega +$$
$$1/\varepsilon + 1/\vartheta + 1/\varpi + 1/\varrho + 1/\varsigma + 1/\varphi +$$

$$A/2 + B/2 + C/2 + D/2 + E/2 + F/2 + G/2 + H/2 + I/2 + J/2 + K/2 + L/2 + M/2 +$$
$$N/2 + O/2 + P/2 + Q/2 + R/2 + S/2 + T/2 + U/2 + V/2 + W/2 + X/2 + Y/2 + Z/2 +$$
$$a/2 + b/2 + c/2 + d/2 + e/2 + f/2 + g/2 + h/2 + i/2 + j/2 + k/2 + l/2 + m/2 +$$
$$n/2 + o/2 + p/2 + q/2 + r/2 + s/2 + t/2 + u/2 + v/2 + w/2 + x/2 + y/2 + z/2 +$$
$$A/2 + B/2 + \mathit{\Gamma}/2 + \mathit{\Delta}/2 + E/2 + Z/2 + H/2 + \mathit{\Theta}/2 + I/2 + K/2 + \mathit{\Lambda}/2 + M/2 +$$
$$N/2 + \mathit{\Xi}/2 + O/2 + \mathit{\Pi}/2 + P/2 + \mathit{\Sigma}/2 + T/2 + \mathit{\Upsilon}/2 + \mathit{\Phi}/2 + X/2 + \mathit{\Psi}/2 + \mathit{\Omega}/2 +$$
$$\alpha/2 + \beta/2 + \gamma/2 + \delta/2 + \epsilon/2 + \zeta/2 + \eta/2 + \theta/2 + \iota/2 + \kappa/2 + \lambda/2 + \mu/2 +$$
$$\nu/2 + \xi/2 + o/2 + \pi/2 + \rho/2 + \sigma/2 + \tau/2 + \upsilon/2 + \phi/2 + \chi/2 + \psi/2 + \omega/2 +$$
$$\varepsilon/2 + \vartheta/2 + \varpi/2 + \varrho/2 + \varsigma/2 + \varphi/2 +$$

3.2.10 (Big) Operators Serif Bold

$\sum_{i=1}^{n} x^n$ $\prod_{i=1}^{n} x^n$ $\coprod_{i=1}^{n} x^n$ $\int_{i=1}^{n} x^n$ $\oint_{i=1}^{n} x^n$
$\bigotimes_{i=1}^{n} x^n$ $\bigoplus_{i=1}^{n} x^n$ $\bigodot_{i=1}^{n} x^n$ $\bigwedge_{i=1}^{n} x^n$ $\bigvee_{i=1}^{n} x^n$ $\biguplus_{i=1}^{n} x^n$ $\bigcup_{i=1}^{n} x^n$ $\bigcap_{i=1}^{n} x^n$ $\bigsqcup_{i=1}^{n} x^n$

$$\sum_{i=1}^{n} x^n \quad \prod_{i=1}^{n} x^n \quad \coprod_{i=1}^{n} x^n \quad \int_{i=1}^{n} x^n \quad \oint_{i=1}^{n} x^n$$

$$\bigotimes_{i=1}^{n} x^n \quad \bigoplus_{i=1}^{n} x^n \quad \bigodot_{i=1}^{n} x^n \quad \bigwedge_{i=1}^{n} x^n \quad \bigvee_{i=1}^{n} x^n \quad \biguplus_{i=1}^{n} x^n \quad \bigcup_{i=1}^{n} x^n \quad \bigcap_{i=1}^{n} x^n \quad \bigsqcup_{i=1}^{n} x^n$$

3.2.11 Radicals Serif Bold

$$\sqrt{x+y} \quad \sqrt{x^2+y^2} \quad \sqrt{x_i^2+y_j^2} \quad \sqrt{\left(\frac{\cos x}{2}\right)} \quad \sqrt{\left(\frac{\sin x}{2}\right)}$$

$$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{x+y}}}}}}}$$

3.2.12 Over- and Underbraces Serif Bold

$$\overbrace{x} \quad \overbrace{x+y} \quad \overbrace{x^2+y^2} \quad \overbrace{x_i^2+y_j^2} \quad \underbrace{x} \quad \underbrace{x+y} \quad \underbrace{x_i+y_j} \quad \underbrace{x_i^2+y_j^2}$$

3.2.13 Normal and Wide Accents Serif Bold

$$\dot{x} \quad \ddot{x} \quad \vec{x} \quad \bar{x} \quad \overline{x} \quad \overline{xx} \quad \tilde{x} \quad \widetilde{x} \quad \widetilde{xx} \quad \widetilde{xxx} \quad \hat{x} \quad \widehat{x} \quad \widehat{xx} \quad \widehat{xxx}$$

$$\hat{x} \quad \check{x} \quad \tilde{x} \quad \acute{x} \quad \grave{x} \quad \dot{x} \quad \ddot{x} \quad \breve{x} \quad \bar{x} \quad \vec{x}$$

3.2.14 Long Arrows Serif Bold

$$\longleftarrow\!\!\!\longrightarrow \quad \leftrightarrow \quad \longleftarrow \quad \longrightarrow \quad \longleftrightarrow \quad \Longleftarrow\!\!\Longrightarrow \quad \Leftrightarrow \quad \Longleftarrow \quad \Longrightarrow \quad \Longleftrightarrow$$

3.2.15 Left and Right Delimiters Serif Bold

$$-(f)--[f]--\lfloor f\rfloor--\lceil f\rceil--\langle f\rangle--\{f\}-$$

Using `\left` and `\right`.

$$-\left(f\right)--\left[f\right]--\left\lfloor f\right\rfloor--\left\lceil f\right\rceil--\left\langle f\right\rangle--\left\{f\right\}-$$

$$-)f(--]f[--/f/--\backslash f\backslash--/f\backslash--\backslash f/-$$

3.2.16 Big-g-g Delimiters Serif Bold

$$-\Biggl\lfloor\biggl\lfloor\Bigl\lfloor\bigl\lfloor\lfloor-\rfloor\bigr\rfloor\Bigr\rfloor\biggr\rfloor\Biggr\rfloor- \qquad -\Biggl(\biggl(\Bigl(\bigl((-)\bigr)\Bigr)\biggr)\Biggr)-$$

$$-\Biggl\lceil\biggl\lceil\Bigl\lceil\bigl\lceil\lceil-\rceil\bigr\rceil\Bigr\rceil\biggr\rceil\Biggr\rceil- \qquad -\Biggl\{\biggl\{\Bigl\{\bigl\{\{-\}\bigr\}\Bigr\}\biggr\}\Biggr\}-$$

$$-\Biggl[\biggl[\Bigl[\bigl[[-]\bigr]\Bigr]\biggr]\Biggr]- \qquad -\Biggl(\biggl(\Bigl(\bigl((-)\bigr)\Bigr)\biggr)\Biggr)-$$

$$-\Biggl\langle\biggl\langle\Bigl\langle\bigl\langle\langle-\rangle\bigr\rangle\Bigr\rangle\biggr\rangle\Biggr\rangle- \qquad -\Biggl\lgroup\biggl\lgroup\Bigl\lgroup\bigl\lgroup\lgroup-\rgroup\bigr\rgroup\Bigr\rgroup\biggr\rgroup\Biggr\rgroup-$$

$$-\Biggl\uparrow\biggl\uparrow\Bigl\uparrow\bigl\uparrow\uparrow-\downarrow\bigr\downarrow\Bigr\downarrow\biggr\downarrow\Biggr\downarrow- \qquad -\Biggl\Uparrow\biggl\Uparrow\Bigl\Uparrow\bigl\Uparrow\Uparrow-\Downarrow\bigr\Downarrow\Bigr\Downarrow\biggr\Downarrow\Biggr\Downarrow-$$

3.2.17 Binary Operators Serif Bold

$x\pm y$	`\pm`	$x\cap y$	`\cap`	$x\diamond y$	`\diamond`	$x\oplus y$	`\oplus`
$x\mp y$	`\mp`	$x\cup y$	`\cup`	$x\bigtriangleup y$	`\bigtriangleup`	$x\ominus y$	`\ominus`
$x\times y$	`\times`	$x\uplus y$	`\uplus`	$x\bigtriangledown y$	`\bigtriangledown`	$x\otimes y$	`\otimes`
$x\div y$	`\div`	$x\sqcap y$	`\sqcap`	$x\triangleleft y$	`\triangleleft`	$x\oslash y$	`\oslash`
$x\ast y$	`\ast`	$x\sqcup y$	`\sqcup`	$x\triangleright y$	`\triangleright`	$x\odot y$	`\odot`
$x\star y$	`\star`	$x\vee y$	`\vee`	$x\lhd y$	`\lhd`	$x\bigcirc y$	`\bigcirc`
$x\circ y$	`\circ`	$x\wedge y$	`\wedge`	$x\rhd y$	`\rhd`	$x\dagger y$	`\dagger`
$x\bullet y$	`\bullet`	$x\setminus y$	`\setminus`	$x\unlhd y$	`\unlhd`	$x\ddagger y$	`\ddagger`
$x\cdot y$	`\cdot`	$x\wr y$	`\wr`	$x\unrhd y$	`\unrhd`	$x\S y$	`\S`
$x+y$	`+`	$x-y$	`-`	$x\amalg y$	`\amalg`	$x\P y$	`\P`

3.2.18 Relations Serif Bold

$x \leq y$	`\leq`	$x \geq y$	`\geq`	$x \equiv y$	`\equiv`	$x \models y$	`\models`
$x \prec y$	`\prec`	$x \succ y$	`\succ`	$x \sim y$	`\sim`	$x \perp y$	`\perp`
$x \preceq y$	`\preceq`	$x \succeq y$	`\succeq`	$x \simeq y$	`\simeq`	$x \mid y$	`\mid`
$x \ll y$	`\ll`	$x \gg y$	`\gg`	$x \asymp y$	`\asymp`	$x \parallel y$	`\parallel`
$x \subset y$	`\subset`	$x \supset y$	`\supset`	$x \approx y$	`\approx`	$x \bowtie y$	`\bowtie`
$x \subseteq y$	`\subseteq`	$x \supseteq y$	`\supseteq`	$x \cong y$	`\cong`	$x \Join y$	`\Join`
$x \sqsubset y$	`\sqsubset`	$x \sqsupset y$	`\sqsupset`	$x \neq y$	`\neq`	$x \smile y$	`\smile`
$x \sqsubseteq y$	`\sqsubseteq`	$x \sqsupseteq y$	`\sqsupseteq`	$x \doteq y$	`\doteq`	$x \frown y$	`\frown`
$x \in y$	`\in`	$x \ni y$	`\ni`	$x \propto y$	`\propto`	$x = y$	`=`
$x \vdash y$	`\vdash`	$x \dashv y$	`\dashv`	$x < y$	`<`	$x > y$	`>`
$x : y$	`:`						

3.2.19 Punctuation Serif Bold

x,y	`,`	$x;y$	`;`	$x\colon y$	`\colon`	$x.y$	`\ldotp`	$x\cdotp y$	`\cdotp`

3.2.20 Arrows Serif Bold

$x \leftarrow y$	`\leftarrow`	$x \longleftarrow y$	`\longleftarrow`	$x \uparrow y$	`\uparrow`
$x \Leftarrow y$	`\Leftarrow`	$x \Longleftarrow y$	`\Longleftarrow`	$x \Uparrow y$	`\Uparrow`
$x \rightarrow y$	`\rightarrow`	$x \longrightarrow y$	`\longrightarrow`	$x \downarrow y$	`\downarrow`
$x \Rightarrow y$	`\Rightarrow`	$x \Longrightarrow y$	`\Longrightarrow`	$x \Downarrow y$	`\Downarrow`
$x \leftrightarrow y$	`\leftrightarrow`	$x \longleftrightarrow y$	`\longleftrightarrow`	$x \updownarrow y$	`\updownarrow`
$x \Leftrightarrow y$	`\Leftrightarrow`	$x \Longleftrightarrow y$	`\Longleftrightarrow`	$x \Updownarrow y$	`\Updownarrow`
$x \mapsto y$	`\mapsto`	$x \longmapsto y$	`\longmapsto`	$x \nearrow y$	`\nearrow`
$x \hookleftarrow y$	`\hookleftarrow`	$x \hookrightarrow y$	`\hookrightarrow`	$x \searrow y$	`\searrow`
$x \leftharpoonup y$	`\leftharpoonup`	$x \rightharpoonup y$	`\rightharpoonup`	$x \swarrow y$	`\swarrow`
$x \leftharpoondown y$	`\leftharpoondown`	$x \rightharpoondown y$	`\rightharpoondown`	$x \nwarrow y$	`\nwarrow`
$x \rightleftharpoons y$	`\rightleftharpoons`	$x \leadsto y$	`\leadsto`		

3.2.21 Miscellaneous Symbols Serif Bold

$x\ldots y$	`\ldots`	$x\cdots y$	`\cdots`	$x\vdots y$	`\vdots`	$x\ddots y$	`\ddots`
$x\aleph y$	`\aleph`	$x\prime y$	`\prime`	$x\forall y$	`\forall`	$x\infty y$	`\infty`
$x\hbar y$	`\hbar`	$x\emptyset y$	`\emptyset`	$x\exists y$	`\exists`	$x\Box y$	`\Box`
$x\imath y$	`\imath`	$x\nabla y$	`\nabla`	$x\neg y$	`\neg`	$x\Diamond y$	`\Diamond`
$x\jmath y$	`\jmath`	$x\surd y$	`\surd`	$x\flat y$	`\flat`	$x\triangle y$	`\triangle`
$x\ell y$	`\ell`	$x\top y$	`\top`	$x\natural y$	`\natural`	$x\clubsuit y$	`\clubsuit`
$x\wp y$	`\wp`	$x\bot y$	`\bot`	$x\sharp y$	`\sharp`	$x\diamondsuit y$	`\diamondsuit`
$x\Re y$	`\Re`	$x\| y$	`|`	$x\backslash y$	`\backslash`	$x\heartsuit y$	`\heartsuit`
$x\Im y$	`\Im`	$x\angle y$	`\angle`	$x\partial y$	`\partial`	$x\spadesuit y$	`\spadesuit`
$x\mho y$	`\mho`	$x.y$	`.`	$x\vert y$	`|`	$x!y$	`!`

3.2.22 Variable-Sized Operators Serif Bold

$x\sum y$	`\sum`	$x\bigcap y$	`\bigcap`	$x\bigodot y$	`\bigodot`
$x\prod y$	`\prod`	$x\bigcup y$	`\bigcup`	$x\bigotimes y$	`\bigotimes`
$x\coprod y$	`\coprod`	$x\bigsqcup y$	`\bigsqcup`	$x\bigoplus y$	`\bigoplus`
$x\int y$	`\int`	$x\bigvee y$	`\bigvee`	$x\biguplus y$	`\biguplus`
$x\oint y$	`\oint`	$x\bigwedge y$	`\bigwedge`		

3.2.23 Log-Like Operators Serif Bold

$x\arccos y$	$x\cos y$	$x\csc y$	$x\exp y$	$x\ker y$	$x\limsup y$	$x\min y$	$x\sinh y$
$x\arcsin y$	$x\cosh y$	$x\deg y$	$x\gcd y$	$x\lg y$	$x\ln y$	$x\Pr y$	$x\sup y$
$x\arctan y$	$x\cot y$	$x\det y$	$x\hom y$	$x\lim y$	$x\log y$	$x\sec y$	$x\tan y$
$x\arg y$	$x\coth y$	$x\dim y$	$x\inf y$	$x\liminf y$	$x\max y$	$x\sin y$	$x\tanh y$

3.2.24 Delimiters Serif Bold

$x(y$	`(`	$x)y$	`)`	$x\uparrow y$	`\uparrow`	$x\Uparrow y$	`\Uparrow`
$x[y$	`[`	$x]y$	`]`	$x\downarrow y$	`\downarrow`	$x\Downarrow y$	`\Downarrow`
$x\{y$	`\{`	$x\}y$	`\}`	$x\updownarrow y$	`\updownarrow`	$x\Updownarrow y$	`\Updownarrow`
$x\lfloor y$	`\lfloor`	$x\rfloor y$	`\rfloor`	$x\lceil y$	`\lceil`	$x\rceil y$	`\rceil`
$x\langle y$	`\langle`	$x\rangle y$	`\rangle`	x/y	`/`	$x\backslash y$	`\backslash`
$x\vert y$	`|`	$x\Vert y$	`|`				

3.2.25 Large Delimiters Serif Bold

$\rmoustache$	`\rmoustache`	$\lmoustache$	`\lmoustache`	$\rgroup$	`\rgroup`	$\lgroup$	`\lgroup`
$\arrowvert$	`\arrowvert`	$\Arrowvert$	`\Arrowvert`	$\bracevert$	`\bracevert`		

3.2.26 Math Mode Accents Serif Bold

$\hat{a}$	`\hat{a}`	$\acute{a}$	`\acute{a}`	$\bar{a}$	`\bar{a}`	$\dot{a}$	`\dot{a}`	$\breve{a}$	`\breve{a}`
$\check{a}$	`\check{a}`	$\grave{a}$	`\grave{a}`	$\vec{a}$	`\vec{a}`	$\ddot{a}$	`\ddot{a}`	$\tilde{a}$	`\tilde{a}`

3.2.27 Miscellaneous Constructions Serif Bold

$\widetilde{abc}$	`\widetilde{abc}`	$\widehat{abc}$	`\widehat{abc}`
$\overleftarrow{abc}$	`\overleftarrow{abc}`	$\overrightarrow{abc}$	`\overrightarrow{abc}`
$\overline{abc}$	`\overline{abc}`	$\underline{abc}$	`\underline{abc}`
$\overbrace{abc}$	`\overbrace{abc}`	$\underbrace{abc}$	`\underbrace{abc}`
$\sqrt{abc}$	`\sqrt{abc}`	$\sqrt[n]{abc}$	`\sqrt[n]{abc}`
f'	`f'`	$\frac{abc}{xyz}$	`\frac{abc}{xyz}`

3.2.28 AMS Delimiters Serif Bold

$x\ulcorner y$	`\ulcorner`	$x\urcorner y$	`\urcorner`	$x\llcorner y$	`\llcorner`	$x\lrcorner y$	`\lrcorner`

3.2.29 AMS Arrows Serif Bold

$x \dashrightarrow y$	`\dashrightarrow`	$x \dashleftarrow y$	`\dashleftarrow`
$x \leftleftarrows y$	`\leftleftarrows`	$x \leftrightarrows y$	`\leftrightarrows`
$x \Lleftarrow y$	`\Lleftarrow`	$x \twoheadleftarrow y$	`\twoheadleftarrow`
$x \leftarrowtail y$	`\leftarrowtail`	$x \looparrowleft y$	`\looparrowleft`
$x \leftrightharpoons y$	`\leftrightharpoons`	$x \curvearrowleft y$	`\curvearrowleft`
$x \circlearrowleft y$	`\circlearrowleft`	$x \Lsh y$	`\Lsh`
$x \upuparrows y$	`\upuparrows`	$x \upharpoonleft y$	`\upharpoonleft`
$x \downharpoonleft y$	`\downharpoonleft`	$x \multimap y$	`\multimap`
$x \leftrightsquigarrow y$	`\leftrightsquigarrow`	$x \rightrightarrows y$	`\rightrightarrows`
$x \rightleftarrows y$	`\rightleftarrows`	$x \rightrightarrows y$	`\rightrightarrows`
$x \rightleftarrows y$	`\rightleftarrows`	$x \twoheadrightarrow y$	`\twoheadrightarrow`
$x \rightarrowtail y$	`\rightarrowtail`	$x \looparrowright y$	`\looparrowright`
$x \rightleftharpoons y$	`\rightleftharpoons`	$x \curvearrowright y$	`\curvearrowright`
$x \circlearrowright y$	`\circlearrowright`	$x \Rsh y$	`\Rsh`
$x \downdownarrows y$	`\downdownarrows`	$x \upharpoonright y$	`\upharpoonright`
$x \downharpoonright y$	`\downharpoonright`	$x \rightsquigarrow y$	`\rightsquigarrow`

3.2.30 AMS Negated Arrows Serif Bold

$x \nleftarrow y$	`\nleftarrow`	$x \nrightarrow y$	`\nrightarrow`
$x \nLeftarrow y$	`\nLeftarrow`	$x \nRightarrow y$	`\nRightarrow`
$x \nleftrightarrow y$	`\nleftrightarrow`	$x \nLeftrightarrow y$	`\nLeftrightarrow`

3.2.31 AMS Greek Serif Bold

$x\digamma y$ `\digamma` $x\varkappa y$ `\varkappa`

3.2.32 AMS Hebrew Serif Bold

$x\beth y$ `\beth` $x\daleth y$ `\daleth` $x\gimel y$ `\gimel`

3.2.33 AMS Miscellaneous Serif Bold

$x\hbar y$	`\hbar`	$x\hslash y$	`\hslash`
$x \vartriangle y$	`\vartriangle`	$x\triangledown y$	`\triangledown`
$x\square y$	`\square`	$x\lozenge y$	`\lozenge`
$x\circledS y$	`\circledS`	$x\angle y$	`\angle`
$x\measuredangle y$	`\measuredangle`	$x\nexists y$	`\nexists`
$x\mho y$	`\mho`	$x\Finv y$	`\Finv`^{u}
$x\Game y$	`\Game`^{u}	$x\Bbbk y$	`\Bbbk`^{u}
$x\backprime y$	`\backprime`	$x\varnothing y$	`\varnothing`
$x\blacktriangle y$	`\blacktriangle`	$x\blacktriangledown y$	`\blacktriangledown`
$x\blacksquare y$	`\blacksquare`	$x\blacklozenge y$	`\blacklozenge`
$x\bigstar y$	`\bigstar`	$x\sphericalangle y$	`\sphericalangle`
$x\complement y$	`\complement`	$x\eth y$	`\eth`
$x\diagup y$	`\diagup`^{u}	$x\diagdown y$	`\diagdown`^{u}

^{u} **Not defined in** `amssymb.sty`**, define using the** `\newsymbol` **command.**

3.2.34 AMS Binary Operators Serif Bold

$x \dotplus y$	`\dotplus`	$x \smallsetminus y$	`\smallsetminus`
$x \Cap y$	`\Cap`	$x \Cup y$	`\Cup`
$x \barwedge y$	`\barwedge`	$x \veebar y$	`\veebar`
$x \doublebarwedge y$	`\doublebarwedge`	$x \boxminus y$	`\boxminus`
$x \boxtimes y$	`\boxtimes`	$x \boxdot y$	`\boxdot`
$x \boxplus y$	`\boxplus`	$x \divideontimes y$	`\divideontimes`
$x \ltimes y$	`\ltimes`	$x \rtimes y$	`\rtimes`
$x \leftthreetimes y$	`\leftthreetimes`	$x \rightthreetimes y$	`\rightthreetimes`
$x \curlywedge y$	`\curlywedge`	$x \curlyvee y$	`\curlyvee`
$x \circleddash y$	`\circleddash`	$x \circledast y$	`\circledast`
$x \circledcirc y$	`\circledcirc`	$x \centerdot y$	`\centerdot`
$x \intercal y$	`\intercal`		

3.2.35 AMS Relations Serif Bold

$x \leqslant y$ \leqslant
$x \lesssim y$ \lesssim
$x \approxeq y$ \approxeq
$x \lll y$ \lll
$x \lesseqgtr y$ \lesseqgtr
$x \doteqdot y$ \doteqdot
$x \fallingdotseq y$ \fallingdotseq
$x \backsimeq y$ \backsimeq
$x \Subset y$ \Subset
$x \preccurlyeq y$ \preccurlyeq
$x \precsim y$ \precsim
$x \vartriangleleft y$ \vartriangleleft
$x \vDash y$ \vDash
$x \smallsmile y$ \smallsmile
$x \bumpeq y$ \bumpeq
$x \geqq y$ \geqq
$x \eqslantgtr y$ \eqslantgtr
$x \gtrapprox y$ \gtrapprox
$x \ggg y$ \ggg
$x \gtreqless y$ \gtreqless
$x \eqcirc y$ \eqcirc
$x \triangleq y$ \triangleq
$x \thickapprox y$ \thickapprox
$x \Supset y$ \Supset
$x \succcurlyeq y$ \succcurlyeq
$x \succsim y$ \succsim
$x \vartriangleright y$ \vartriangleright
$x \Vdash y$ \Vdash
$x \shortparallel y$ \shortparallel
$x \pitchfork y$ \pitchfork
$x \blacktriangleleft y$ \blacktriangleleft
$x \backepsilon y$ \backepsilon
$x \because y$ \because

3.2.36 AMS Negated Relations Serif Bold

$x \nless y$	\nless	$x \nleq y$	\nleq
$x \nleqslant y$	\nleqslant	$x \nleqq y$	\nleqq
$x \lneq y$	\lneq	$x \lneqq y$	\lneqq
$x \lvertneqq y$	\lvertneqq	$x \lnsim y$	\lnsim
$x \lnapprox y$	\lnapprox	$x \nprec y$	\nprec
$x \npreceq y$	\npreceq	$x \precnsim y$	\precnsim
$x \precnapprox y$	\precnapprox	$x \nsim y$	\nsim
$x \nshortmid y$	\nshortmid	$x \nmid y$	\nmid
$x \nvdash y$	\nvdash	$x \nvDash y$	\nvDash
$x \ntriangleleft y$	\ntriangleleft	$x \ntrianglelefteq y$	\ntrianglelefteq
$x \nsubseteq y$	\nsubseteq	$x \subsetneq y$	\subsetneq
$x \varsubsetneq y$	\varsubsetneq	$x \subsetneqq y$	\subsetneqq
$x \varsubsetneqq y$	\varsubsetneqq	$x \ngtr y$	\ngtr
$x \ngeq y$	\ngeq	$x \ngeqslant y$	\ngeqslant
$x \ngeqq y$	\ngeqq	$x \gneq y$	\gneq
$x \gneqq y$	\gneqq	$x \gvertneqq y$	\gvertneqq
$x \gnsim y$	\gnsim	$x \gnapprox y$	\gnapprox
$x \nsucc y$	\nsucc	$x \nsucceq y$	\nsucceq
$x \nsucceqq y$	\nsucceqq	$x \succnsim y$	\succnsim
$x \succnapprox y$	\succnapprox	$x \ncong y$	\ncong
$x \nshortparallel y$	\nshortparallel	$x \nparallel y$	\nparallel
$x \nvDash y$	\nvDash	$x \nVDash y$	\nVDash
$x \ntriangleright y$	\ntriangleright	$x \ntrianglerighteq y$	\ntrianglerighteq
$x \nsupseteq y$	\nsupseteq	$x \nsupseteqq y$	\nsupseteqq
$x \supsetneq y$	\supsetneq	$x \varsupsetneq y$	\varsupsetneq
$x \supsetneqq y$	\supsetneqq	$x \varsupsetneqq y$	\varsupsetneqq

3.2.37 Math “Torture” Test Serif Bold

Most of the following examples are taken from *The TeXbook* (Knuth, 1984, see https://ctan.org/pkg/texbook) and were adapted for LaTeX from Karl Berry’s torture test for plain TeX math fonts.

$x+y-z, \quad x+y*z, \quad z*y/z, \quad (x+y)(x-y)=x^2-y^2,$

$x\times y\cdot z=[x\,y\,z], \quad x\circ y\bullet z, \quad x\cup y\cap z, \quad x\sqcup y\sqcap z,$

$x\vee y\wedge z, \quad x\pm y\mp z, \quad x=y/z, \quad x:=y, \quad x\le y\ne z, \quad x\sim y\simeq z\,x\equiv y\not\equiv z, \quad x\subset y\subseteq z$

$\sin 2\theta=2\sin\theta\cos\theta, \quad \mathrm{O}(n\log n\log n), \quad \Pr(X>x)=\exp(-x/\mu),$

$\bigl(x\in A(n)\bigm|x\in B(n)\bigr), \quad \bigcup_n X_n \bigm\| \bigcap_n Y_n$

In-text matrices $\left(\begin{smallmatrix}1&1\\0&1\end{smallmatrix}\right)$ **and** $\left(\begin{smallmatrix}a&b&c\\1&m&n\end{smallmatrix}\right)$.

$$a_0+\cfrac{1}{a_1+\cfrac{1}{a_2+\cfrac{1}{a_3+\cfrac{1}{a_4}}}}$$

$$\binom{p}{2}x^2y^{p-2}-\frac{1}{1-x}\frac{1}{1-x^2}=\frac{a+1}{b}\bigg/\frac{c+1}{d}.$$

$$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}}$$

$$\sqrt[n]{1+\sqrt[k]{1+\sqrt[5]{1+\sqrt[4]{1+\sqrt[3]{1+x}}}}}$$

$$\left(\frac{\partial^2}{\partial x^2}+\frac{\partial^2}{\partial y^2}\right)|\varphi(x+\mathrm{i}y)|^2=0$$

$$\pi(n)=\sum_{m=2}^{n}\left\lfloor\left(\sum_{k=1}^{m-1}\lfloor(m/k)/\lceil m/k\rceil\rfloor\right)^{-1}\right\rfloor.$$

$$\int_0^\infty\frac{t-\mathrm{i}b}{t^2+b^2}e^{\mathrm{i}at}\,\mathrm{d}t=e^{ab}E_1(ab),\quad a,b>0.$$

$$A:=\begin{pmatrix}x-\lambda & 1 & 0\\ 0 & x-\lambda & 1\\ 0 & 0 & x-\lambda\end{pmatrix}.$$

$$\begin{pmatrix}a & b & c\\ d & e & f\end{pmatrix}\begin{pmatrix}u & x\\ v & y\\ w & z\end{pmatrix}$$

$$A=\begin{pmatrix}a_{11} & a_{12} & \dots & a_{1n}\\ a_{21} & a_{22} & \dots & a_{2n}\\ \vdots & \vdots & \ddots & \vdots\\ a_{m1} & a_{m2} & \dots & a_{mn}\end{pmatrix}$$

$$M=\begin{array}{c}\\ C\\ I\\ C'\end{array}\begin{array}{c}\begin{array}{ccc}C & I & C'\end{array}\\ \begin{pmatrix}1 & 0 & 0\\ b & 1-b & 0\\ 0 & a & 1-a\end{pmatrix}\end{array}$$

$$\sum_{n=0}^{\infty}a_nz^n\quad\text{converges if}\quad|z|<\left(\limsup_{n\to\infty}\sqrt[n]{|a_n|}\right)^{-1}.$$

$$\frac{f(x+\Delta x)-f(x)}{\Delta x} \to f'(x) \qquad \text{as } \Delta x \to 0.$$

$$\|u_i\| = 1, \qquad u_i \cdot u_j = 0 \quad \text{if } i \neq j.$$

$$\text{The confluent image of} \quad \left\{ \begin{array}{c} \text{an arc} \\ \text{a circle} \\ \text{a fan} \end{array} \right\} \quad \text{is} \quad \left\{ \begin{array}{c} \text{an arc} \\ \text{an arc or a circle} \\ \text{a fan or an arc} \end{array} \right\}.$$

$$\begin{aligned} T(n) \;\le\; T(2^{\lceil \lg n \rceil}) &\le c(3^{\lceil \lg n \rceil} - 2^{\lceil \lg n \rceil}) \\ &< 3c \cdot 3^{\lg n} \\ &= 3c\,n^{\lg 3}. \end{aligned}$$

$$\begin{aligned} (x+y)(x-y) &= x^2 - xy + yx - y^2 \\ &= x^2 - y^2 \\ (x+y)^2 &= x^2 + 2xy + y^2. \end{aligned}$$

$$\begin{aligned} \left(\int\limits_{-\infty}^{\infty} e^{-x^2}\, dx \right)^2 &= \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)}\, dx\, dy \\ &= \int_0^{2\pi} \int_0^{\infty} e^{-r^2}\, dr\, d\theta \\ &= \int_0^{2\pi} \left(e^{-\frac{r^2}{2}} \Big|_{r=0}^{r=\infty} \right) d\theta \\ &= \pi. \end{aligned}$$

$$\prod_{k \ge 0} \frac{1}{(1-q^k z)} = \sum_{n \ge 0} z^n \Big/ \prod_{1 \le k \le n} (1-q^k).$$

$$\sum_{\substack{0<i\le m \\ 0<j\le n}} p(i,j) \neq \sum_{i=1}^{p} \sum_{j=1}^{q} \sum_{k=1}^{r} a_{ij} b_{jk} c_{ki} \neq \sum_{\substack{1\le i\le p \\ 1\le j\le q \\ 1\le k\le r}} a_{ij} b_{jk} c_{ki}$$

$$\max_{1 \le n \le m} \log_2 P_n \quad \text{and} \quad \lim_{x \to 0} \frac{\sin x}{x} = 1$$

Inline math: $\max_{1 \le n \le m} \log_2 P_n$ and $\lim_{x \to 0} \frac{\sin x}{x} = 1$

$$p_1(n) = \lim_{m \to \infty} \sum_{\nu=0}^{\infty} \left(1 - \cos^{2m}(\nu!^n \pi/n)\right)$$

Inline math: $p_1(n) = \lim_{m \to \infty} \sum_{\nu=0}^{\infty} \left(1 - \cos^{2m}(\nu!^n \pi/n)\right)$

3.3 Math Test Sans Serif

3.3.1 Overview Sans Serif

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$; $\sigma_{\varepsilon}, c^{\alpha}$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{a}\mathrm{b}\beta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\sigma$
mathup: $\mathrm{a}\upalpha\upalpha\mathrm{b}\upbeta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\upsigma$
mathit: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathbf: $\boldsymbol{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$; $\boldsymbol{\sigma_{\varepsilon}, c^{\alpha}}$
mathnormal: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathrm: $\mathbf{a}\boldsymbol{\alpha}\mathbf{a}\mathbf{b}\boldsymbol{\beta}\mathbf{G}\mathbf{\Gamma\Gamma}\mathbf{P}\mathbf{\Pi\Sigma}\boldsymbol{\sigma}$
mathup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$; $\sigma_{\varepsilon}, c^{\alpha}$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{a}\mathrm{b}\beta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\sigma$
mathup: $\mathrm{a}\upalpha\upalpha\mathrm{b}\upbeta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\upsigma$
mathit: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$; $\boldsymbol{\sigma_{\varepsilon}, c^{\alpha}}$
mathnormal: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathrm: $\mathbf{a}\boldsymbol{\alpha}\mathbf{a}\mathbf{b}\boldsymbol{\beta}\mathbf{G}\mathbf{\Gamma\Gamma}\mathbf{P}\mathbf{\Pi\Sigma}\boldsymbol{\sigma}$
mathup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

3.3.2 Formulas Sans Serif

$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega, F,$

α, β, γ, δ, ε, ε, ζ, η, θ, θ, ι, κ, λ, μ, ν, ξ, ο, π, π, ρ, ρ, σ, ς, τ, υ, ϕ, ϕ, χ, ψ, ω, ϝ, A, B, Γ, Δ, E, Z, H, Θ, I, K, Λ, M, N, Ξ, O, Π, P, Σ, T, Y, Φ, X, Ψ, Ω, Ϝ,

α, β, γ, δ, ε, ε, ζ, η, θ, θ, ι, κ, λ, μ, ν, ξ, ο, π, π, ρ, ρ, σ, ς, τ, υ, ϕ, ϕ, χ, ψ, ω, ϝ, A, B, Γ, Δ, E, Z, H, Θ, I, K, Λ, M, N, Ξ, O, Π, P, Σ, T, Y, Φ, X, Ψ, Ω, Ϝ,

α, β, γ, δ, ε, ε, ζ, η, θ, θ, ι, κ, λ, μ, ν, ξ, ο, π, π, ρ, ρ, σ, ς, τ, υ, ϕ, ϕ, χ, ψ, ω, ϝ, A, B, Γ, Δ, E, Z, H, Θ, I, K, Λ, M, N, Ξ, O, Π, P, Σ, T, Y, Φ, X, Ψ, Ω, Ϝ,

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$

$\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$

$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x\, f(x)\, \mathrm{d}x = \binom{27}{2}$$

$\boldsymbol{\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda}$

$\boldsymbol{\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7}$

$\boldsymbol{\hat{\beta} = (X'X)^{-1}X'y}$

$$\boldsymbol{\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)}$$

$$\boldsymbol{\int_{-\infty}^{\infty} x\, f(x)\, \mathrm{d}x = \binom{27}{2}}$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$

$\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$

$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x\, f(x)\, \mathrm{d}x = \binom{27}{2}$$

$\boldsymbol{\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda}$

$\boldsymbol{\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7}$

$\boldsymbol{\hat{\beta} = (X'X)^{-1}X'y}$

$$\boldsymbol{\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)}$$

$$\int_{-\infty}^{\infty} x\, f(x)\, dx = \binom{27}{2}$$

3.3.3 Math Alphabets Sans Serif

Default

$$0, 1, 2, 3, 4, 5, 6, 7, 8, 9,$$
$$A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,$$
$$a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,$$
$$A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega,$$
$$\alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \theta, \pi, \rho, \varsigma, \phi,$$

Math Normal (`\mathnormal`)

$$0, 1, 2, 3, 4, 5, 6, 7, 8, 9,$$
$$A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,$$
$$a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,$$
$$A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega,$$
$$\alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \theta, \pi, \rho, \varsigma, \phi,$$

Math Italic (`\mathit`)

$$\mathit{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}$$
$$A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,$$
$$a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,$$
$$A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega,$$
$$\alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \theta, \pi, \rho, \varsigma, \phi,$$

Math Roman (`\mathrm`)

$$\mathrm{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}$$
$$\mathrm{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,}$$
$$\mathrm{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,}$$
$$\mathrm{A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega,}$$
$$\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, \mathrm{o}, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \vartheta, \varpi, \varrho, \varsigma, \varphi,$$

Math Bold (\mathbf)

$$\mathbf{0}, \mathbf{1}, \mathbf{2}, \mathbf{3}, \mathbf{4}, \mathbf{5}, \mathbf{6}, \mathbf{7}, \mathbf{8}, \mathbf{9},$$
$$\boldsymbol{A}, \boldsymbol{B}, \boldsymbol{C}, \boldsymbol{D}, \boldsymbol{E}, \boldsymbol{F}, \boldsymbol{G}, \boldsymbol{H}, \boldsymbol{I}, \boldsymbol{J}, \boldsymbol{K}, \boldsymbol{L}, \boldsymbol{M}, \boldsymbol{N}, \boldsymbol{O}, \boldsymbol{P}, \boldsymbol{Q}, \boldsymbol{R}, \boldsymbol{S}, \boldsymbol{T}, \boldsymbol{U}, \boldsymbol{V}, \boldsymbol{W}, \boldsymbol{X}, \boldsymbol{Y}, \boldsymbol{Z},$$
$$\boldsymbol{a}, \boldsymbol{b}, \boldsymbol{c}, \boldsymbol{d}, \boldsymbol{e}, \boldsymbol{f}, \boldsymbol{g}, \boldsymbol{h}, \boldsymbol{i}, \boldsymbol{j}, \boldsymbol{k}, \boldsymbol{l}, \boldsymbol{m}, \boldsymbol{n}, \boldsymbol{o}, \boldsymbol{p}, \boldsymbol{q}, \boldsymbol{r}, \boldsymbol{s}, \boldsymbol{t}, \boldsymbol{u}, \boldsymbol{v}, \boldsymbol{w}, \boldsymbol{x}, \boldsymbol{y}, \boldsymbol{z},$$
$$\boldsymbol{A}, \boldsymbol{B}, \boldsymbol{\Gamma}, \boldsymbol{\Delta}, \boldsymbol{E}, \boldsymbol{Z}, \boldsymbol{H}, \boldsymbol{\Theta}, \boldsymbol{I}, \boldsymbol{K}, \boldsymbol{\Lambda}, \boldsymbol{M}, \boldsymbol{N}, \boldsymbol{\Xi}, \boldsymbol{O}, \boldsymbol{\Pi}, \boldsymbol{P}, \boldsymbol{\Sigma}, \boldsymbol{T}, \boldsymbol{Y}, \boldsymbol{\Phi}, \boldsymbol{X}, \boldsymbol{\Psi}, \boldsymbol{\Omega},$$
$$\boldsymbol{\alpha}, \boldsymbol{\beta}, \boldsymbol{\gamma}, \boldsymbol{\delta}, \boldsymbol{\epsilon}, \boldsymbol{\zeta}, \boldsymbol{\eta}, \boldsymbol{\theta}, \boldsymbol{\iota}, \boldsymbol{\kappa}, \boldsymbol{\lambda}, \boldsymbol{\mu}, \boldsymbol{\nu}, \boldsymbol{\xi}, \boldsymbol{o}, \boldsymbol{\pi}, \boldsymbol{\rho}, \boldsymbol{\sigma}, \boldsymbol{\tau}, \boldsymbol{\upsilon}, \boldsymbol{\phi}, \boldsymbol{\chi}, \boldsymbol{\psi}, \boldsymbol{\omega}, \boldsymbol{\varepsilon}, \boldsymbol{\vartheta}, \boldsymbol{\varpi}, \boldsymbol{\varrho}, \boldsymbol{\varsigma}, \boldsymbol{\varphi},$$

Caligraphic (\mathcal)

$$\mathcal{A}, \mathcal{B}, \mathcal{C}, \mathcal{D}, \mathcal{E}, \mathcal{F}, \mathcal{G}, \mathcal{H}, \mathcal{I}, \mathcal{J}, \mathcal{K}, \mathcal{L}, \mathcal{M}, \mathcal{N}, \mathcal{O}, \mathcal{P}, \mathcal{Q}, \mathcal{R}, \mathcal{S}, \mathcal{T}, \mathcal{U}, \mathcal{V}, \mathcal{W}, \mathcal{X}, \mathcal{Y}, \mathcal{Z},$$

Script (\mathscr)

$$\mathscr{A}, \mathscr{B}, \mathscr{C}, \mathscr{D}, \mathscr{E}, \mathscr{F}, \mathscr{G}, \mathscr{H}, \mathscr{I}, \mathscr{J}, \mathscr{K}, \mathscr{L}, \mathscr{M}, \mathscr{N}, \mathscr{O}, \mathscr{P}, \mathscr{Q}, \mathscr{R}, \mathscr{S}, \mathscr{T}, \mathscr{U}, \mathscr{V}, \mathscr{W}, \mathscr{X}, \mathscr{Y}, \mathscr{Z},$$

Fraktur (\mathfrak)

$$\mathfrak{A}, \mathfrak{B}, \mathfrak{C}, \mathfrak{D}, \mathfrak{E}, \mathfrak{F}, \mathfrak{G}, \mathfrak{H}, \mathfrak{I}, \mathfrak{J}, \mathfrak{K}, \mathfrak{L}, \mathfrak{M}, \mathfrak{N}, \mathfrak{O}, \mathfrak{P}, \mathfrak{Q}, \mathfrak{R}, \mathfrak{S}, \mathfrak{T}, \mathfrak{U}, \mathfrak{V}, \mathfrak{W}, \mathfrak{X}, \mathfrak{Y}, \mathfrak{Z},$$
$$\mathfrak{a}, \mathfrak{b}, \mathfrak{c}, \mathfrak{d}, \mathfrak{e}, \mathfrak{f}, \mathfrak{g}, \mathfrak{h}, \mathfrak{i}, \mathfrak{j}, \mathfrak{k}, \mathfrak{l}, \mathfrak{m}, \mathfrak{n}, \mathfrak{o}, \mathfrak{p}, \mathfrak{q}, \mathfrak{r}, \mathfrak{s}, \mathfrak{t}, \mathfrak{u}, \mathfrak{v}, \mathfrak{w}, \mathfrak{x}, \mathfrak{y}, \mathfrak{z},$$

Blackboard Bold (\mathbb)

$$\mathbb{A}, \mathbb{B}, \mathbb{C}, \mathbb{D}, \mathbb{E}, \mathbb{F}, \mathbb{G}, \mathbb{H}, \mathbb{I}, \mathbb{J}, \mathbb{K}, \mathbb{L}, \mathbb{M}, \mathbb{N}, \mathbb{O}, \mathbb{P}, \mathbb{Q}, \mathbb{R}, \mathbb{S}, \mathbb{T}, \mathbb{U}, \mathbb{V}, \mathbb{W}, \mathbb{X}, \mathbb{Y}, \mathbb{Z},$$

3.3.4 Character Sidebearings Sans Serif

Default

$$|A| + |B| + |C| + |D| + |E| + |F| + |G| + |H| + |I| + |J| + |K| + |L| + |M| +$$
$$|N| + |O| + |P| + |Q| + |R| + |S| + |T| + |U| + |V| + |W| + |X| + |Y| + |Z| +$$
$$|a| + |b| + |c| + |d| + |e| + |f| + |g| + |h| + |i| + |j| + |k| + |l| + |m| +$$
$$|n| + |o| + |p| + |q| + |r| + |s| + |t| + |u| + |v| + |w| + |x| + |y| + |z| +$$
$$|A| + |B| + |\Gamma| + |\Delta| + |E| + |Z| + |H| + |\Theta| + |I| + |K| + |\Lambda| + |M| +$$
$$|N| + |\Xi| + |O| + |\Pi| + |P| + |\Sigma| + |T| + |Y| + |\Phi| + |X| + |\Psi| + |\Omega| +$$
$$|\alpha| + |\beta| + |\gamma| + |\delta| + |\epsilon| + |\zeta| + |\eta| + |\theta| + |\iota| + |\kappa| + |\lambda| + |\mu| +$$
$$|\nu| + |\xi| + |o| + |\pi| + |\rho| + |\sigma| + |\tau| + |\upsilon| + |\phi| + |\chi| + |\psi| + |\omega| +$$
$$|\varepsilon| + |\vartheta| + |\varpi| + |\varrho| + |\varsigma| + |\varphi| +$$

Math Roman (`\mathrm`)

$$|\mathrm{A}| + |\mathrm{B}| + |\mathrm{C}| + |\mathrm{D}| + |\mathrm{E}| + |\mathrm{F}| + |\mathrm{G}| + |\mathrm{H}| + |\mathrm{I}| + |\mathrm{J}| + |\mathrm{K}| + |\mathrm{L}| + |\mathrm{M}| +$$
$$|\mathrm{N}| + |\mathrm{O}| + |\mathrm{P}| + |\mathrm{Q}| + |\mathrm{R}| + |\mathrm{S}| + |\mathrm{T}| + |\mathrm{U}| + |\mathrm{V}| + |\mathrm{W}| + |\mathrm{X}| + |\mathrm{Y}| + |\mathrm{Z}| +$$
$$|\mathrm{a}| + |\mathrm{b}| + |\mathrm{c}| + |\mathrm{d}| + |\mathrm{e}| + |\mathrm{f}| + |\mathrm{g}| + |\mathrm{h}| + |\mathrm{i}| + |\mathrm{j}| + |\mathrm{k}| + |\mathrm{l}| + |\mathrm{m}| +$$
$$|\mathrm{n}| + |\mathrm{o}| + |\mathrm{p}| + |\mathrm{q}| + |\mathrm{r}| + |\mathrm{s}| + |\mathrm{t}| + |\mathrm{u}| + |\mathrm{v}| + |\mathrm{w}| + |\mathrm{x}| + |\mathrm{y}| + |\mathrm{z}| +$$
$$|\mathrm{A}| + |\mathrm{B}| + |\Gamma| + |\Delta| + |\mathrm{E}| + |\mathrm{Z}| + |\mathrm{H}| + |\Theta| + |\mathrm{I}| + |\mathrm{K}| + |\Lambda| + |\mathrm{M}| +$$
$$|\mathrm{N}| + |\Xi| + |\mathrm{O}| + |\Pi| + |\mathrm{P}| + |\Sigma| + |\mathrm{T}| + |\Upsilon| + |\Phi| + |\mathrm{X}| + |\Psi| + |\Omega| +$$

Math Bold (`\mathbf`)

$$|\boldsymbol{A}| + |\boldsymbol{B}| + |\boldsymbol{C}| + |\boldsymbol{D}| + |\boldsymbol{E}| + |\boldsymbol{F}| + |\boldsymbol{G}| + |\boldsymbol{H}| + |\boldsymbol{I}| + |\boldsymbol{J}| + |\boldsymbol{K}| + |\boldsymbol{L}| + |\boldsymbol{M}| +$$
$$|\boldsymbol{N}| + |\boldsymbol{O}| + |\boldsymbol{P}| + |\boldsymbol{Q}| + |\boldsymbol{R}| + |\boldsymbol{S}| + |\boldsymbol{T}| + |\boldsymbol{U}| + |\boldsymbol{V}| + |\boldsymbol{W}| + |\boldsymbol{X}| + |\boldsymbol{Y}| + |\boldsymbol{Z}| +$$
$$|\boldsymbol{a}| + |\boldsymbol{b}| + |\boldsymbol{c}| + |\boldsymbol{d}| + |\boldsymbol{e}| + |\boldsymbol{f}| + |\boldsymbol{g}| + |\boldsymbol{h}| + |\boldsymbol{i}| + |\boldsymbol{j}| + |\boldsymbol{k}| + |\boldsymbol{l}| + |\boldsymbol{m}| +$$
$$|\boldsymbol{n}| + |\boldsymbol{o}| + |\boldsymbol{p}| + |\boldsymbol{q}| + |\boldsymbol{r}| + |\boldsymbol{s}| + |\boldsymbol{t}| + |\boldsymbol{u}| + |\boldsymbol{v}| + |\boldsymbol{w}| + |\boldsymbol{x}| + |\boldsymbol{y}| + |\boldsymbol{z}| +$$
$$|\boldsymbol{A}| + |\boldsymbol{B}| + |\boldsymbol{\Gamma}| + |\boldsymbol{\Delta}| + |\boldsymbol{E}| + |\boldsymbol{Z}| + |\boldsymbol{H}| + |\boldsymbol{\Theta}| + |\boldsymbol{I}| + |\boldsymbol{K}| + |\boldsymbol{\Lambda}| + |\boldsymbol{M}| +$$
$$|\boldsymbol{N}| + |\boldsymbol{\Xi}| + |\boldsymbol{O}| + |\boldsymbol{\Pi}| + |\boldsymbol{P}| + |\boldsymbol{\Sigma}| + |\boldsymbol{T}| + |\boldsymbol{Y}| + |\boldsymbol{\Phi}| + |\boldsymbol{X}| + |\boldsymbol{\Psi}| + |\boldsymbol{\Omega}| +$$

Math Calligraphic (`\mathcal`)

$$|\mathcal{A}| + |\mathcal{B}| + |\mathcal{C}| + |\mathcal{D}| + |\mathcal{E}| + |\mathcal{F}| + |\mathcal{G}| + |\mathcal{H}| + |\mathcal{I}| + |\mathcal{J}| + |\mathcal{K}| + |\mathcal{L}| + |\mathcal{M}| +$$
$$|\mathcal{N}| + |\mathcal{O}| + |\mathcal{P}| + |\mathcal{Q}| + |\mathcal{R}| + |\mathcal{S}| + |\mathcal{T}| + |\mathcal{U}| + |\mathcal{V}| + |\mathcal{W}| + |\mathcal{X}| + |\mathcal{Y}| + |\mathcal{Z}| +$$

3.3.5 Superscript Positioning Sans Serif

Default

$$A^2 + B^2 + C^2 + D^2 + E^2 + F^2 + G^2 + H^2 + I^2 + J^2 + K^2 + L^2 + M^2 +$$
$$N^2 + O^2 + P^2 + Q^2 + R^2 + S^2 + T^2 + U^2 + V^2 + W^2 + X^2 + Y^2 + Z^2 +$$
$$a^2 + b^2 + c^2 + d^2 + e^2 + f^2 + g^2 + h^2 + i^2 + j^2 + k^2 + l^2 + m^2 +$$
$$n^2 + o^2 + p^2 + q^2 + r^2 + s^2 + t^2 + u^2 + v^2 + w^2 + x^2 + y^2 + z^2 +$$
$$A^2 + B^2 + \mathit{\Gamma}^2 + \mathit{\Delta}^2 + E^2 + Z^2 + H^2 + \mathit{\Theta}^2 + I^2 + K^2 + \mathit{\Lambda}^2 + M^2 +$$
$$N^2 + \mathit{\Xi}^2 + O^2 + \mathit{\Pi}^2 + P^2 + \mathit{\Sigma}^2 + T^2 + Y^2 + \mathit{\Phi}^2 + X^2 + \mathit{\Psi}^2 + \mathit{\Omega}^2 +$$
$$\alpha^2 + \beta^2 + \gamma^2 + \delta^2 + \epsilon^2 + \zeta^2 + \eta^2 + \theta^2 + \iota^2 + \kappa^2 + \lambda^2 + \mu^2 +$$
$$\nu^2 + \xi^2 + o^2 + \pi^2 + \rho^2 + \sigma^2 + \tau^2 + \upsilon^2 + \phi^2 + \chi^2 + \psi^2 + \omega^2 +$$
$$\varepsilon^2 + \vartheta^2 + \varpi^2 + \varrho^2 + \varsigma^2 + \varphi^2 +$$

Math Roman (`\mathrm`)

$$
\begin{gathered}
\mathrm{A}^2+\mathrm{B}^2+\mathrm{C}^2+\mathrm{D}^2+\mathrm{E}^2+\mathrm{F}^2+\mathrm{G}^2+\mathrm{H}^2+\mathrm{I}^2+\mathrm{J}^2+\mathrm{K}^2+\mathrm{L}^2+\mathrm{M}^2+\\
\mathrm{N}^2+\mathrm{O}^2+\mathrm{P}^2+\mathrm{Q}^2+\mathrm{R}^2+\mathrm{S}^2+\mathrm{T}^2+\mathrm{U}^2+\mathrm{V}^2+\mathrm{W}^2+\mathrm{X}^2+\mathrm{Y}^2+\mathrm{Z}^2+\\
\mathrm{a}^2+\mathrm{b}^2+\mathrm{c}^2+\mathrm{d}^2+\mathrm{e}^2+\mathrm{f}^2+\mathrm{g}^2+\mathrm{h}^2+\mathrm{i}^2+\mathrm{j}^2+\mathrm{k}^2+\mathrm{l}^2+\mathrm{m}^2+\\
\mathrm{n}^2+\mathrm{o}^2+\mathrm{p}^2+\mathrm{q}^2+\mathrm{r}^2+\mathrm{s}^2+\mathrm{t}^2+\mathrm{u}^2+\mathrm{v}^2+\mathrm{w}^2+\mathrm{x}^2+\mathrm{y}^2+\mathrm{z}^2+\\
\mathrm{A}^2+\mathrm{B}^2+\Gamma^2+\Delta^2+\mathrm{E}^2+\mathrm{Z}^2+\mathrm{H}^2+\Theta^2+\mathrm{I}^2+\mathrm{K}^2+\Lambda^2+\mathrm{M}^2+\\
\mathrm{N}^2+\Xi^2+\mathrm{O}^2+\Pi^2+\mathrm{P}^2+\Sigma^2+\mathrm{T}^2+\Upsilon^2+\Phi^2+\mathrm{X}^2+\Psi^2+\Omega^2+
\end{gathered}
$$

Math Bold (`\mathbf`)

$$
\begin{gathered}
\mathbf{A}^2+\mathbf{B}^2+\mathbf{C}^2+\mathbf{D}^2+\mathbf{E}^2+\mathbf{F}^2+\mathbf{G}^2+\mathbf{H}^2+\mathbf{I}^2+\mathbf{J}^2+\mathbf{K}^2+\mathbf{L}^2+\mathbf{M}^2+\\
\mathbf{N}^2+\mathbf{O}^2+\mathbf{P}^2+\mathbf{Q}^2+\mathbf{R}^2+\mathbf{S}^2+\mathbf{T}^2+\mathbf{U}^2+\mathbf{V}^2+\mathbf{W}^2+\mathbf{X}^2+\mathbf{Y}^2+\mathbf{Z}^2+\\
\mathbf{a}^2+\mathbf{b}^2+\mathbf{c}^2+\mathbf{d}^2+\mathbf{e}^2+\mathbf{f}^2+\mathbf{g}^2+\mathbf{h}^2+\mathbf{i}^2+\mathbf{j}^2+\mathbf{k}^2+\mathbf{l}^2+\mathbf{m}^2+\\
\mathbf{n}^2+\mathbf{o}^2+\mathbf{p}^2+\mathbf{q}^2+\mathbf{r}^2+\mathbf{s}^2+\mathbf{t}^2+\mathbf{u}^2+\mathbf{v}^2+\mathbf{w}^2+\mathbf{x}^2+\mathbf{y}^2+\mathbf{z}^2+\\
\mathbf{A}^2+\mathbf{B}^2+\boldsymbol{\Gamma}^2+\boldsymbol{\Delta}^2+\mathbf{E}^2+\mathbf{Z}^2+\mathbf{H}^2+\boldsymbol{\Theta}^2+\mathbf{I}^2+\mathbf{K}^2+\boldsymbol{\Lambda}^2+\mathbf{M}^2+\\
\mathbf{N}^2+\boldsymbol{\Xi}^2+\mathbf{O}^2+\boldsymbol{\Pi}^2+\mathbf{P}^2+\boldsymbol{\Sigma}^2+\mathbf{T}^2+\boldsymbol{\Upsilon}^2+\boldsymbol{\Phi}^2+\mathbf{X}^2+\boldsymbol{\Psi}^2+\boldsymbol{\Omega}^2+
\end{gathered}
$$

Math Calligraphic (`\mathcal`)

$$
\begin{gathered}
\mathcal{A}^2+\mathcal{B}^2+\mathcal{C}^2+\mathcal{D}^2+\mathcal{E}^2+\mathcal{F}^2+\mathcal{G}^2+\mathcal{H}^2+\mathcal{I}^2+\mathcal{J}^2+\mathcal{K}^2+\mathcal{L}^2+\mathcal{M}^2+\\
\mathcal{N}^2+\mathcal{O}^2+\mathcal{P}^2+\mathcal{Q}^2+\mathcal{R}^2+\mathcal{S}^2+\mathcal{T}^2+\mathcal{U}^2+\mathcal{V}^2+\mathcal{W}^2+\mathcal{X}^2+\mathcal{Y}^2+\mathcal{Z}^2+
\end{gathered}
$$

3.3.6 Subscript Positioning Sans Serif

Default

$$
\begin{gathered}
A_i+B_i+C_i+D_i+E_i+F_i+G_i+H_i+I_i+J_i+K_i+L_i+M_i+\\
N_i+O_i+P_i+Q_i+R_i+S_i+T_i+U_i+V_i+W_i+X_i+Y_i+Z_i+\\
a_i+b_i+c_i+d_i+e_i+f_i+g_i+h_i+i_i+j_i+k_i+l_i+m_i+\\
n_i+o_i+p_i+q_i+r_i+s_i+t_i+u_i+v_i+w_i+x_i+y_i+z_i+\\
A_i+B_i+\mathit{\Gamma}_i+\mathit{\Delta}_i+E_i+Z_i+H_i+\mathit{\Theta}_i+I_i+K_i+\mathit{\Lambda}_i+M_i+\\
N_i+\mathit{\Xi}_i+O_i+\mathit{\Pi}_i+P_i+\mathit{\Sigma}_i+T_i+\mathit{\Upsilon}_i+\mathit{\Phi}_i+X_i+\mathit{\Psi}_i+\mathit{\Omega}_i+\\
\alpha_i+\beta_i+\gamma_i+\delta_i+\epsilon_i+\zeta_i+\eta_i+\theta_i+\iota_i+\kappa_i+\lambda_i+\mu_i+\\
\nu_i+\xi_i+o_i+\pi_i+\rho_i+\sigma_i+\tau_i+\upsilon_i+\phi_i+\chi_i+\psi_i+\omega_i+\\
\varepsilon_i+\vartheta_i+\varpi_i+\varrho_i+\varsigma_i+\varphi_i+
\end{gathered}
$$

Math Roman (\mathrm)

$$\mathrm{A}_i + \mathrm{B}_i + \mathrm{C}_i + \mathrm{D}_i + \mathrm{E}_i + \mathrm{F}_i + \mathrm{G}_i + \mathrm{H}_i + \mathrm{I}_i + \mathrm{J}_i + \mathrm{K}_i + \mathrm{L}_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \mathrm{O}_i + \mathrm{P}_i + \mathrm{Q}_i + \mathrm{R}_i + \mathrm{S}_i + \mathrm{T}_i + \mathrm{U}_i + \mathrm{V}_i + \mathrm{W}_i + \mathrm{X}_i + \mathrm{Y}_i + \mathrm{Z}_i +$$
$$\mathrm{a}_i + \mathrm{b}_i + \mathrm{c}_i + \mathrm{d}_i + \mathrm{e}_i + \mathrm{f}_i + \mathrm{g}_i + \mathrm{h}_i + \mathrm{i}_i + \mathrm{j}_i + \mathrm{k}_i + \mathrm{l}_i + \mathrm{m}_i +$$
$$\mathrm{n}_i + \mathrm{o}_i + \mathrm{p}_i + \mathrm{q}_i + \mathrm{r}_i + \mathrm{s}_i + \mathrm{t}_i + \mathrm{u}_i + \mathrm{v}_i + \mathrm{w}_i + \mathrm{x}_i + \mathrm{y}_i + \mathrm{z}_i +$$
$$\mathrm{A}_i + \mathrm{B}_i + \Gamma_i + \Delta_i + \mathrm{E}_i + \mathrm{Z}_i + \mathrm{H}_i + \Theta_i + \mathrm{I}_i + \mathrm{K}_i + \Lambda_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \Xi_i + \mathrm{O}_i + \Pi_i + \mathrm{P}_i + \Sigma_i + \mathrm{T}_i + \Upsilon_i + \Phi_i + \mathrm{X}_i + \Psi_i + \Omega_i +$$

Math Bold (\mathbf)

$$\mathbf{A}_i + \mathbf{B}_i + \mathbf{C}_i + \mathbf{D}_i + \mathbf{E}_i + \mathbf{F}_i + \mathbf{G}_i + \mathbf{H}_i + \mathbf{I}_i + \mathbf{J}_i + \mathbf{K}_i + \mathbf{L}_i + \mathbf{M}_i +$$
$$\mathbf{N}_i + \mathbf{O}_i + \mathbf{P}_i + \mathbf{Q}_i + \mathbf{R}_i + \mathbf{S}_i + \mathbf{T}_i + \mathbf{U}_i + \mathbf{V}_i + \mathbf{W}_i + \mathbf{X}_i + \mathbf{Y}_i + \mathbf{Z}_i +$$
$$\mathbf{a}_i + \mathbf{b}_i + \mathbf{c}_i + \mathbf{d}_i + \mathbf{e}_i + \mathbf{f}_i + \mathbf{g}_i + \mathbf{h}_i + \mathbf{i}_i + \mathbf{j}_i + \mathbf{k}_i + \mathbf{l}_i + \mathbf{m}_i +$$
$$\mathbf{n}_i + \mathbf{o}_i + \mathbf{p}_i + \mathbf{q}_i + \mathbf{r}_i + \mathbf{s}_i + \mathbf{t}_i + \mathbf{u}_i + \mathbf{v}_i + \mathbf{w}_i + \mathbf{x}_i + \mathbf{y}_i + \mathbf{z}_i +$$
$$\mathbf{A}_i + \mathbf{B}_i + \boldsymbol{\Gamma}_i + \boldsymbol{\Delta}_i + \mathbf{E}_i + \mathbf{Z}_i + \mathbf{H}_i + \boldsymbol{\Theta}_i + \mathbf{I}_i + \mathbf{K}_i + \boldsymbol{\Lambda}_i + \mathbf{M}_i +$$
$$\mathbf{N}_i + \boldsymbol{\Xi}_i + \mathbf{O}_i + \boldsymbol{\Pi}_i + \mathbf{P}_i + \boldsymbol{\Sigma}_i + \mathbf{T}_i + \mathbf{Y}_i + \boldsymbol{\Phi}_i + \mathbf{X}_i + \boldsymbol{\Psi}_i + \boldsymbol{\Omega}_i +$$

Math Calligraphic (\mathcal)

$$\mathcal{A}_i + \mathcal{B}_i + \mathcal{C}_i + \mathcal{D}_i + \mathcal{E}_i + \mathcal{F}_i + \mathcal{G}_i + \mathcal{H}_i + \mathcal{I}_i + \mathcal{J}_i + \mathcal{K}_i + \mathcal{L}_i + \mathcal{M}_i +$$
$$\mathcal{N}_i + \mathcal{O}_i + \mathcal{P}_i + \mathcal{Q}_i + \mathcal{R}_i + \mathcal{S}_i + \mathcal{T}_i + \mathcal{U}_i + \mathcal{V}_i + \mathcal{W}_i + \mathcal{X}_i + \mathcal{Y}_i + \mathcal{Z}_i +$$

3.3.7 Accent Positioning Sans Serif

Default

$$\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} +$$
$$\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} +$$
$$\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} +$$
$$\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{i} + \hat{j} + \hat{k} + \hat{l} + \hat{m} +$$
$$\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} +$$
$$\hat{A} + \hat{B} + \hat{\Gamma} + \hat{\Delta} + \hat{E} + \hat{Z} + \hat{H} + \hat{\Theta} + \hat{I} + \hat{K} + \hat{\Lambda} + \hat{M} +$$
$$\hat{N} + \hat{\Xi} + \hat{O} + \hat{\Pi} + \hat{P} + \hat{\Sigma} + \hat{T} + \hat{Y} + \hat{\Phi} + \hat{X} + \hat{\Psi} + \hat{\Omega} +$$
$$\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\imath} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} +$$
$$\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} +$$
$$\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +$$

Math Italic (`\mathit`)

$$\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} +$$
$$\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} +$$
$$\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} +$$
$$\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{i} + \hat{j} + \hat{k} + \hat{l} + \hat{m} + \hat{\ell} + \hat{\wp} + \hat{\imath} + \hat{\jmath} + \tilde{\imath}$$
$$\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} +$$
$$\hat{A} + \hat{B} + \hat{\Gamma} + \hat{\Delta} + \hat{E} + \hat{Z} + \hat{H} + \hat{\Theta} + \hat{I} + \hat{K} + \hat{\Lambda} + \hat{M} +$$
$$\hat{N} + \hat{\Xi} + \hat{O} + \hat{\Pi} + \hat{P} + \hat{\Sigma} + \hat{T} + \hat{\Upsilon} + \hat{\Phi} + \hat{X} + \hat{\Psi} + \hat{\Omega} +$$
$$\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\iota} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} +$$
$$\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} +$$
$$\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +$$

Math Roman (`\mathrm`)

$$\hat{\mathrm{0}} + \hat{\mathrm{1}} + \hat{\mathrm{2}} + \hat{\mathrm{3}} + \hat{\mathrm{4}} + \hat{\mathrm{5}} + \hat{\mathrm{6}} + \hat{\mathrm{7}} + \hat{\mathrm{8}} + \hat{\mathrm{9}} +$$
$$\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\mathrm{C}} + \hat{\mathrm{D}} + \hat{\mathrm{E}} + \hat{\mathrm{F}} + \hat{\mathrm{G}} + \hat{\mathrm{H}} + \hat{\mathrm{I}} + \hat{\mathrm{J}} + \hat{\mathrm{K}} + \hat{\mathrm{L}} + \hat{\mathrm{M}} +$$
$$\hat{\mathrm{N}} + \hat{\mathrm{O}} + \hat{\mathrm{P}} + \hat{\mathrm{Q}} + \hat{\mathrm{R}} + \hat{\mathrm{S}} + \hat{\mathrm{T}} + \hat{\mathrm{U}} + \hat{\mathrm{V}} + \hat{\mathrm{W}} + \hat{\mathrm{X}} + \hat{\mathrm{Y}} + \hat{\mathrm{Z}} +$$
$$\hat{\mathrm{a}} + \hat{\mathrm{b}} + \hat{\mathrm{c}} + \hat{\mathrm{d}} + \hat{\mathrm{e}} + \hat{\mathrm{f}} + \hat{\mathrm{g}} + \hat{\mathrm{h}} + \hat{\mathrm{i}} + \hat{\mathrm{j}} + \hat{\mathrm{k}} + \hat{\mathrm{l}} + \hat{\mathrm{m}} +$$
$$\hat{\mathrm{n}} + \hat{\mathrm{o}} + \hat{\mathrm{p}} + \hat{\mathrm{q}} + \hat{\mathrm{r}} + \hat{\mathrm{s}} + \hat{\mathrm{t}} + \hat{\mathrm{u}} + \hat{\mathrm{v}} + \hat{\mathrm{w}} + \hat{\mathrm{x}} + \hat{\mathrm{y}} + \hat{\mathrm{z}} +$$
$$\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\mathrm{\Gamma}} + \hat{\mathrm{\Delta}} + \hat{\mathrm{E}} + \hat{\mathrm{Z}} + \hat{\mathrm{H}} + \hat{\mathrm{\Theta}} + \hat{\mathrm{I}} + \hat{\mathrm{K}} + \hat{\mathrm{\Lambda}} + \hat{\mathrm{M}} +$$
$$\hat{\mathrm{N}} + \hat{\mathrm{\Xi}} + \hat{\mathrm{O}} + \hat{\mathrm{\Pi}} + \hat{\mathrm{P}} + \hat{\mathrm{\Sigma}} + \hat{\mathrm{T}} + \hat{\mathrm{\Upsilon}} + \hat{\mathrm{\Phi}} + \hat{\mathrm{X}} + \hat{\mathrm{\Psi}} + \hat{\mathrm{\Omega}} +$$

Math Bold (`\mathbf`)

$$\hat{\mathbf{0}} + \hat{\mathbf{1}} + \hat{\mathbf{2}} + \hat{\mathbf{3}} + \hat{\mathbf{4}} + \hat{\mathbf{5}} + \hat{\mathbf{6}} + \hat{\mathbf{7}} + \hat{\mathbf{8}} + \hat{\mathbf{9}} +$$
$$\hat{\mathbf{A}} + \hat{\mathbf{B}} + \hat{\mathbf{C}} + \hat{\mathbf{D}} + \hat{\mathbf{E}} + \hat{\mathbf{F}} + \hat{\mathbf{G}} + \hat{\mathbf{H}} + \hat{\mathbf{I}} + \hat{\mathbf{J}} + \hat{\mathbf{K}} + \hat{\mathbf{L}} + \hat{\mathbf{M}} +$$
$$\hat{\mathbf{N}} + \hat{\mathbf{O}} + \hat{\mathbf{P}} + \hat{\mathbf{Q}} + \hat{\mathbf{R}} + \hat{\mathbf{S}} + \hat{\mathbf{T}} + \hat{\mathbf{U}} + \hat{\mathbf{V}} + \hat{\mathbf{W}} + \hat{\mathbf{X}} + \hat{\mathbf{Y}} + \hat{\mathbf{Z}} +$$
$$\hat{\mathbf{a}} + \hat{\mathbf{b}} + \hat{\mathbf{c}} + \hat{\mathbf{d}} + \hat{\mathbf{e}} + \hat{\mathbf{f}} + \hat{\mathbf{g}} + \hat{\mathbf{h}} + \hat{\mathbf{i}} + \hat{\mathbf{j}} + \hat{\mathbf{k}} + \hat{\mathbf{l}} + \hat{\mathbf{m}} +$$
$$\hat{\mathbf{n}} + \hat{\mathbf{o}} + \hat{\mathbf{p}} + \hat{\mathbf{q}} + \hat{\mathbf{r}} + \hat{\mathbf{s}} + \hat{\mathbf{t}} + \hat{\mathbf{u}} + \hat{\mathbf{v}} + \hat{\mathbf{w}} + \hat{\mathbf{x}} + \hat{\mathbf{y}} + \hat{\mathbf{z}} +$$
$$\hat{\mathbf{A}} + \hat{\mathbf{B}} + \hat{\mathbf{\Gamma}} + \hat{\mathbf{\Delta}} + \hat{\mathbf{E}} + \hat{\mathbf{Z}} + \hat{\mathbf{H}} + \hat{\mathbf{\Theta}} + \hat{\mathbf{I}} + \hat{\mathbf{K}} + \hat{\mathbf{\Lambda}} + \hat{\mathbf{M}} +$$
$$\hat{\mathbf{N}} + \hat{\mathbf{\Xi}} + \hat{\mathbf{O}} + \hat{\mathbf{\Pi}} + \hat{\mathbf{P}} + \hat{\mathbf{\Sigma}} + \hat{\mathbf{T}} + \hat{\mathbf{\Upsilon}} + \hat{\mathbf{\Phi}} + \hat{\mathbf{X}} + \hat{\mathbf{\Psi}} + \hat{\mathbf{\Omega}} +$$

Math Calligraphic (`\mathcal`)

$$\hat{\mathcal{A}} + \hat{\mathcal{B}} + \hat{\mathcal{C}} + \hat{\mathcal{D}} + \hat{\mathcal{E}} + \hat{\mathcal{F}} + \hat{\mathcal{G}} + \hat{\mathcal{H}} + \hat{\mathcal{I}} + \hat{\mathcal{J}} + \hat{\mathcal{K}} + \hat{\mathcal{L}} + \hat{\mathcal{M}} +$$
$$\hat{\mathcal{N}} + \hat{\mathcal{O}} + \hat{\mathcal{P}} + \hat{\mathcal{Q}} + \hat{\mathcal{R}} + \hat{\mathcal{S}} + \hat{\mathcal{T}} + \hat{\mathcal{U}} + \hat{\mathcal{V}} + \hat{\mathcal{W}} + \hat{\mathcal{X}} + \hat{\mathcal{Y}} + \hat{\mathcal{Z}} +$$

3.3.8 Differentials Sans Serif

$$
\begin{aligned}
&dA + dB + dC + dD + dE + dF + dG + dH + dI + dJ + dK + dL + dM +\\
&dN + dO + dP + dQ + dR + dS + dT + dU + dV + dW + dX + dY + dZ +\\
&da + db + dc + dd + de + df + dg + dh + di + dj + dk + dl + dm +\\
&dn + do + dp + dq + dr + ds + dt + du + dv + dw + dx + dy + dz +\\
&dA + dB + d\mathit{\Gamma} + d\mathit{\Delta} + dE + dZ + dH + d\mathit{\Theta} + dI + dK + d\mathit{\Lambda} + dM +\\
&dN + d\mathit{\Xi} + dO + d\mathit{\Pi} + dP + d\mathit{\Sigma} + dT + d\mathit{\Upsilon} + d\mathit{\Phi} + dX + d\mathit{\Psi} + d\mathit{\Omega} +\\
&d\alpha + d\beta + d\gamma + d\delta + d\epsilon + d\zeta + d\eta + d\theta + d\iota + d\kappa + d\lambda + d\mu +\\
&d\nu + d\xi + do + d\pi + d\rho + d\sigma + d\tau + d\upsilon + d\phi + d\chi + d\psi + d\omega +\\
&d\varepsilon + d\vartheta + d\varpi + d\varrho + d\varsigma + d\varphi +\\
&d\mathrm{A} + d\mathrm{B} + d\Gamma + d\Delta + d\mathrm{E} + d\mathrm{Z} + d\mathrm{H} + d\Theta + d\mathrm{I} + d\mathrm{K} + d\Lambda + d\mathrm{M} +\\
&d\mathrm{N} + d\Xi + d\mathrm{O} + d\Pi + d\mathrm{P} + d\Sigma + d\mathrm{T} + d\Upsilon + d\Phi + d\mathrm{X} + d\Psi + d\Omega +
\end{aligned}
$$

$$
\begin{aligned}
&\mathrm{d}A + \mathrm{d}B + \mathrm{d}C + \mathrm{d}D + \mathrm{d}E + \mathrm{d}F + \mathrm{d}G + \mathrm{d}H + \mathrm{d}I + \mathrm{d}J + \mathrm{d}K + \mathrm{d}L + \mathrm{d}M +\\
&\mathrm{d}N + \mathrm{d}O + \mathrm{d}P + \mathrm{d}Q + \mathrm{d}R + \mathrm{d}S + \mathrm{d}T + \mathrm{d}U + \mathrm{d}V + \mathrm{d}W + \mathrm{d}X + \mathrm{d}Y + \mathrm{d}Z +\\
&\mathrm{d}a + \mathrm{d}b + \mathrm{d}c + \mathrm{d}d + \mathrm{d}e + \mathrm{d}f + \mathrm{d}g + \mathrm{d}h + \mathrm{d}i + \mathrm{d}j + \mathrm{d}k + \mathrm{d}l + \mathrm{d}m +\\
&\mathrm{d}n + \mathrm{d}o + \mathrm{d}p + \mathrm{d}q + \mathrm{d}r + \mathrm{d}s + \mathrm{d}t + \mathrm{d}u + \mathrm{d}v + \mathrm{d}w + \mathrm{d}x + \mathrm{d}y + \mathrm{d}z +\\
&\mathrm{d}A + \mathrm{d}B + \mathrm{d}\mathit{\Gamma} + \mathrm{d}\mathit{\Delta} + \mathrm{d}E + \mathrm{d}Z + \mathrm{d}H + \mathrm{d}\mathit{\Theta} + \mathrm{d}I + \mathrm{d}K + \mathrm{d}\mathit{\Lambda} + \mathrm{d}M +\\
&\mathrm{d}N + \mathrm{d}\mathit{\Xi} + \mathrm{d}O + \mathrm{d}\mathit{\Pi} + \mathrm{d}P + \mathrm{d}\mathit{\Sigma} + \mathrm{d}T + \mathrm{d}\mathit{\Upsilon} + \mathrm{d}\mathit{\Phi} + \mathrm{d}X + \mathrm{d}\mathit{\Psi} + \mathrm{d}\mathit{\Omega} +\\
&\mathrm{d}\alpha + \mathrm{d}\beta + \mathrm{d}\gamma + \mathrm{d}\delta + \mathrm{d}\epsilon + \mathrm{d}\zeta + \mathrm{d}\eta + \mathrm{d}\theta + \mathrm{d}\iota + \mathrm{d}\kappa + \mathrm{d}\lambda + \mathrm{d}\mu +\\
&\mathrm{d}\nu + \mathrm{d}\xi + \mathrm{d}o + \mathrm{d}\pi + \mathrm{d}\rho + \mathrm{d}\sigma + \mathrm{d}\tau + \mathrm{d}\upsilon + \mathrm{d}\phi + \mathrm{d}\chi + \mathrm{d}\psi + \mathrm{d}\omega +\\
&\mathrm{d}\varepsilon + \mathrm{d}\vartheta + \mathrm{d}\varpi + \mathrm{d}\varrho + \mathrm{d}\varsigma + \mathrm{d}\varphi +\\
&\mathrm{d}\mathrm{A} + \mathrm{d}\mathrm{B} + \mathrm{d}\Gamma + \mathrm{d}\Delta + \mathrm{d}\mathrm{E} + \mathrm{d}\mathrm{Z} + \mathrm{d}\mathrm{H} + \mathrm{d}\Theta + \mathrm{d}\mathrm{I} + \mathrm{d}\mathrm{K} + \mathrm{d}\Lambda + \mathrm{d}\mathrm{M} +\\
&\mathrm{d}\mathrm{N} + \mathrm{d}\Xi + \mathrm{d}\mathrm{O} + \mathrm{d}\Pi + \mathrm{d}\mathrm{P} + \mathrm{d}\Sigma + \mathrm{d}\mathrm{T} + \mathrm{d}\Upsilon + \mathrm{d}\Phi + \mathrm{d}\mathrm{X} + \mathrm{d}\Psi + \mathrm{d}\Omega +
\end{aligned}
$$

$\partial A + \partial B + \partial C + \partial D + \partial E + \partial F + \partial G + \partial H + \partial I + \partial J + \partial K + \partial L + \partial M +$
$\partial N + \partial O + \partial P + \partial Q + \partial R + \partial S + \partial T + \partial U + \partial V + \partial W + \partial X + \partial Y + \partial Z +$
$\partial a + \partial b + \partial c + \partial d + \partial e + \partial f + \partial g + \partial h + \partial i + \partial j + \partial k + \partial l + \partial m +$
$\partial n + \partial o + \partial p + \partial q + \partial r + \partial s + \partial t + \partial u + \partial v + \partial w + \partial x + \partial y + \partial z +$
$\partial A + \partial B + \partial \mathit{\Gamma} + \partial \mathit{\Delta} + \partial E + \partial Z + \partial H + \partial \mathit{\Theta} + \partial I + \partial K + \partial \mathit{\Lambda} + \partial M +$
$\partial N + \partial \mathit{\Xi} + \partial O + \partial \mathit{\Pi} + \partial P + \partial \mathit{\Sigma} + \partial T + \partial \mathit{\Upsilon} + \partial \mathit{\Phi} + \partial X + \partial \mathit{\Psi} + \partial \mathit{\Omega} +$
$\partial \alpha + \partial \beta + \partial \gamma + \partial \delta + \partial \epsilon + \partial \zeta + \partial \eta + \partial \theta + \partial \iota + \partial \kappa + \partial \lambda + \partial \mu +$
$\partial \nu + \partial \xi + \partial o + \partial \pi + \partial \rho + \partial \sigma + \partial \tau + \partial \upsilon + \partial \phi + \partial \chi + \partial \psi + \partial \omega +$
$\partial \varepsilon + \partial \vartheta + \partial \varpi + \partial \varrho + \partial \varsigma + \partial \varphi +$
$\partial \mathrm{A} + \partial \mathrm{B} + \partial \Gamma + \partial \Delta + \partial \mathrm{E} + \partial \mathrm{Z} + \partial \mathrm{H} + \partial \Theta + \partial \mathrm{I} + \partial \mathrm{K} + \partial \Lambda + \partial \mathrm{M} +$
$\partial \mathrm{N} + \partial \Xi + \partial \mathrm{O} + \partial \Pi + \partial \mathrm{P} + \partial \Sigma + \partial \mathrm{T} + \partial \Upsilon + \partial \Phi + \partial \mathrm{X} + \partial \Psi + \partial \Omega +$

3.3.9 Slash Kerning Sans Serif

$1/A + 1/B + 1/C + 1/D + 1/E + 1/F + 1/G + 1/H + 1/I + 1/J + 1/K + 1/L + 1/M +$
$1/N + 1/O + 1/P + 1/Q + 1/R + 1/S + 1/T + 1/U + 1/V + 1/W + 1/X + 1/Y + 1/Z +$
$1/a + 1/b + 1/c + 1/d + 1/e + 1/f + 1/g + 1/h + 1/i + 1/j + 1/k + 1/l + 1/m +$
$1/n + 1/o + 1/p + 1/q + 1/r + 1/s + 1/t + 1/u + 1/v + 1/w + 1/x + 1/y + 1/z +$
$1/A + 1/B + 1/\mathit{\Gamma} + 1/\mathit{\Delta} + 1/E + 1/Z + 1/H + 1/\mathit{\Theta} + 1/I + 1/K + 1/\mathit{\Lambda} + 1/M +$
$1/N + 1/\mathit{\Xi} + 1/O + 1/\mathit{\Pi} + 1/P + 1/\mathit{\Sigma} + 1/T + 1/\mathit{\Upsilon} + 1/\mathit{\Phi} + 1/X + 1/\mathit{\Psi} + 1/\mathit{\Omega} +$
$1/\alpha + 1/\beta + 1/\gamma + 1/\delta + 1/\epsilon + 1/\zeta + 1/\eta + 1/\theta + 1/\iota + 1/\kappa + 1/\lambda + 1/\mu +$
$1/\nu + 1/\xi + 1/o + 1/\pi + 1/\rho + 1/\sigma + 1/\tau + 1/\upsilon + 1/\phi + 1/\chi + 1/\psi + 1/\omega +$
$1/\varepsilon + 1/\vartheta + 1/\varpi + 1/\varrho + 1/\varsigma + 1/\varphi +$

$A/2 + B/2 + C/2 + D/2 + E/2 + F/2 + G/2 + H/2 + I/2 + J/2 + K/2 + L/2 + M/2 +$
$N/2 + O/2 + P/2 + Q/2 + R/2 + S/2 + T/2 + U/2 + V/2 + W/2 + X/2 + Y/2 + Z/2 +$
$a/2 + b/2 + c/2 + d/2 + e/2 + f/2 + g/2 + h/2 + i/2 + j/2 + k/2 + l/2 + m/2 +$
$n/2 + o/2 + p/2 + q/2 + r/2 + s/2 + t/2 + u/2 + v/2 + w/2 + x/2 + y/2 + z/2 +$
$A/2 + B/2 + \mathit{\Gamma}/2 + \mathit{\Delta}/2 + E/2 + Z/2 + H/2 + \mathit{\Theta}/2 + I/2 + K/2 + \mathit{\Lambda}/2 + M/2 +$
$N/2 + \mathit{\Xi}/2 + O/2 + \mathit{\Pi}/2 + P/2 + \mathit{\Sigma}/2 + T/2 + \mathit{\Upsilon}/2 + \mathit{\Phi}/2 + X/2 + \mathit{\Psi}/2 + \mathit{\Omega}/2 +$
$\alpha/2 + \beta/2 + \gamma/2 + \delta/2 + \epsilon/2 + \zeta/2 + \eta/2 + \theta/2 + \iota/2 + \kappa/2 + \lambda/2 + \mu/2 +$
$\nu/2 + \xi/2 + o/2 + \pi/2 + \rho/2 + \sigma/2 + \tau/2 + \upsilon/2 + \phi/2 + \chi/2 + \psi/2 + \omega/2 +$
$\varepsilon/2 + \vartheta/2 + \varpi/2 + \varrho/2 + \varsigma/2 + \varphi/2 +$

3.3.10 (Big) Operators Sans Serif

$\sum_{i=1}^n x^n \quad \prod_{i=1}^n x^n \quad \coprod_{i=1}^n x^n \quad \int_{i=1}^n x^n \quad \oint_{i=1}^n x^n$
$\bigotimes_{i=1}^n x^n \quad \bigoplus_{i=1}^n x^n \quad \bigodot_{i=1}^n x^n \quad \bigwedge_{i=1}^n x^n \quad \bigvee_{i=1}^n x^n \quad \biguplus_{i=1}^n x^n \quad \bigcup_{i=1}^n x^n \quad \bigcap_{i=1}^n x^n \quad \bigsqcup_{i=1}^n x^n$

$$\sum_{i=1}^n x^n \quad \prod_{i=1}^n x^n \quad \coprod_{i=1}^n x^n \quad \int_{i=1}^n x^n \quad \oint_{i=1}^n x^n$$

$$\bigotimes_{i=1}^n x^n \quad \bigoplus_{i=1}^n x^n \quad \bigodot_{i=1}^n x^n \quad \bigwedge_{i=1}^n x^n \quad \bigvee_{i=1}^n x^n \quad \biguplus_{i=1}^n x^n \quad \bigcup_{i=1}^n x^n \quad \bigcap_{i=1}^n x^n \quad \bigsqcup_{i=1}^n x^n$$

3.3.11 Radicals Sans Serif

$$\sqrt{x+y} \quad \sqrt{x^2+y^2} \quad \sqrt{x_i^2+y_j^2} \quad \sqrt{\left(\frac{\cos x}{2}\right)} \quad \sqrt{\left(\frac{\sin x}{2}\right)}$$

$$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{x+y}}}}}}}$$

3.3.12 Over- and Underbraces Sans Serif

$$\overbrace{x} \quad \overbrace{x+y} \quad \overbrace{x^2+y^2} \quad \overbrace{x_i^2+y_j^2} \quad \underbrace{x} \quad \underbrace{x+y} \quad \underbrace{x_i+y_j} \quad \underbrace{x_i^2+y_j^2}$$

3.3.13 Normal and Wide Accents Sans Serif

$$\dot{x} \quad \ddot{x} \quad \vec{x} \quad \bar{x} \quad \overline{x} \quad \overline{xx} \quad \tilde{x} \quad \widetilde{x} \quad \widetilde{xx} \quad \widetilde{xxx} \quad \hat{x} \quad \widehat{x} \quad \widehat{xx} \quad \widehat{xxx}$$

$$\hat{x} \quad \check{x} \quad \tilde{x} \quad \acute{x} \quad \grave{x} \quad \dot{x} \quad \ddot{x} \quad \breve{x} \quad \bar{x} \quad \vec{x}$$

3.3.14 Long Arrows Sans Serif

$$\longleftarrow\!\!\longrightarrow \quad \leftrightarrow \quad \longleftarrow \quad \longrightarrow \quad \longleftrightarrow \quad \Longleftarrow\!\!\Longrightarrow \quad \Leftrightarrow \quad \Longleftarrow \quad \Longrightarrow \quad \Longleftrightarrow$$

3.3.15 Left and Right Delimiters Sans Serif

$$-(f)--[f]--\lfloor f\rfloor--\lceil f\rceil--\langle f\rangle--\{f\}-$$

Using `\left` and `\right`.

$$-\left(f\right)--\left[f\right]--\left\lfloor f\right\rfloor--\left\lceil f\right\rceil--\left\langle f\right\rangle--\left\{f\right\}-$$

$$-\left)f\right(--\left]f\right[--\left/f\right/--\left\backslash f\right\backslash--\left/f\right\backslash--\left\backslash f\right/-$$

3.3.16 Big-g-g Delimiters Sans Serif

$$-\Bigg\lfloor\bigg\lfloor\Big\lfloor\big\lfloor\lfloor-\rfloor\big\rfloor\Big\rfloor\bigg\rfloor\Bigg\rfloor- \qquad -\Bigg(\bigg(\Big(\big((-)\big)\Big)\bigg)\Bigg)-$$

$$-\Bigg\lceil\bigg\lceil\Big\lceil\big\lceil\lceil-\rceil\big\rceil\Big\rceil\bigg\rceil\Bigg\rceil- \qquad -\Bigg\{\bigg\{\Big\{\big\{\{-\}\big\}\Big\}\bigg\}\Bigg\}-$$

$$-\Bigg[\bigg[\Big[\big[[-]\big]\Big]\bigg]\Bigg]- \qquad -\Bigg(\bigg(\Big(\big((-)\big)\Big)\bigg)\Bigg)-$$

$$-\Bigg\langle\bigg\langle\Big\langle\big\langle\langle-\rangle\big\rangle\Big\rangle\bigg\rangle\Bigg\rangle- \qquad -\Bigg\lgroup\bigg\lgroup\Big\lgroup\big\lgroup\lgroup-\rgroup\big\rgroup\Big\rgroup\bigg\rgroup\Bigg\rgroup-$$

$$-\Bigg\uparrow\bigg\uparrow\Big\uparrow\big\uparrow\uparrow-\downarrow\big\downarrow\Big\downarrow\bigg\downarrow\Bigg\downarrow- \qquad -\Bigg\Uparrow\bigg\Uparrow\Big\Uparrow\big\Uparrow\Uparrow-\Downarrow\big\Downarrow\Big\Downarrow\bigg\Downarrow\Bigg\Downarrow-$$

3.3.17 Binary Operators Sans Serif

$x \pm y$	`\pm`	$x \cap y$	`\cap`	$x \diamond y$	`\diamond`	$x \oplus y$	`\oplus`
$x \mp y$	`\mp`	$x \cup y$	`\cup`	$x \bigtriangleup y$	`\bigtriangleup`	$x \ominus y$	`\ominus`
$x \times y$	`\times`	$x \uplus y$	`\uplus`	$x \bigtriangledown y$	`\bigtriangledown`	$x \otimes y$	`\otimes`
$x \div y$	`\div`	$x \sqcap y$	`\sqcap`	$x \triangleleft y$	`\triangleleft`	$x \oslash y$	`\oslash`
$x \ast y$	`\ast`	$x \sqcup y$	`\sqcup`	$x \triangleright y$	`\triangleright`	$x \odot y$	`\odot`
$x \star y$	`\star`	$x \vee y$	`\vee`	$x \lhd y$	`\lhd`	$x \bigcirc y$	`\bigcirc`
$x \circ y$	`\circ`	$x \wedge y$	`\wedge`	$x \rhd y$	`\rhd`	$x \dagger y$	`\dagger`
$x \bullet y$	`\bullet`	$x \setminus y$	`\setminus`	$x \unlhd y$	`\unlhd`	$x \ddagger y$	`\ddagger`
$x \cdot y$	`\cdot`	$x \wr y$	`\wr`	$x \unrhd y$	`\unrhd`	$x \S y$	`\S`
$x + y$	`+`	$x - y$	`-`	$x \amalg y$	`\amalg`	$x \P y$	`\P`

3.3.18 Relations Sans Serif

$x \leq y$	`\leq`	$x \geq y$	`\geq`	$x \equiv y$	`\equiv`	$x \models y$	`\models`
$x \prec y$	`\prec`	$x \succ y$	`\succ`	$x \sim y$	`\sim`	$x \perp y$	`\perp`
$x \preceq y$	`\preceq`	$x \succeq y$	`\succeq`	$x \simeq y$	`\simeq`	$x \mid y$	`\mid`
$x \ll y$	`\ll`	$x \gg y$	`\gg`	$x \asymp y$	`\asymp`	$x \parallel y$	`\parallel`
$x \subset y$	`\subset`	$x \supset y$	`\supset`	$x \approx y$	`\approx`	$x \bowtie y$	`\bowtie`
$x \subseteq y$	`\subseteq`	$x \supseteq y$	`\supseteq`	$x \cong y$	`\cong`	$x \Join y$	`\Join`
$x \sqsubset y$	`\sqsubset`	$x \sqsupset y$	`\sqsupset`	$x \neq y$	`\neq`	$x \smile y$	`\smile`
$x \sqsubseteq y$	`\sqsubseteq`	$x \sqsupseteq y$	`\sqsupseteq`	$x \doteq y$	`\doteq`	$x \frown y$	`\frown`
$x \in y$	`\in`	$x \ni y$	`\ni`	$x \propto y$	`\propto`	$x = y$	`=`
$x \vdash y$	`\vdash`	$x \dashv y$	`\dashv`	$x < y$	`<`	$x > y$	`>`
$x : y$	`:`						

3.3.19 Punctuation Sans Serif

x, y	`,`	$x; y$	`;`	$x \colon y$	`\colon`	$x.y$	`\ldotp`	$x \cdotp y$	`\cdotp`

3.3.20 Arrows Sans Serif

$x \leftarrow y$	`\leftarrow`	$x \longleftarrow y$	`\longleftarrow`	$x \uparrow y$	`\uparrow`
$x \Leftarrow y$	`\Leftarrow`	$x \Longleftarrow y$	`\Longleftarrow`	$x \Uparrow y$	`\Uparrow`
$x \rightarrow y$	`\rightarrow`	$x \longrightarrow y$	`\longrightarrow`	$x \downarrow y$	`\downarrow`
$x \Rightarrow y$	`\Rightarrow`	$x \Longrightarrow y$	`\Longrightarrow`	$x \Downarrow y$	`\Downarrow`
$x \leftrightarrow y$	`\leftrightarrow`	$x \longleftrightarrow y$	`\longleftrightarrow`	$x \updownarrow y$	`\updownarrow`
$x \Leftrightarrow y$	`\Leftrightarrow`	$x \Longleftrightarrow y$	`\Longleftrightarrow`	$x \Updownarrow y$	`\Updownarrow`
$x \mapsto y$	`\mapsto`	$x \longmapsto y$	`\longmapsto`	$x \nearrow y$	`\nearrow`
$x \hookleftarrow y$	`\hookleftarrow`	$x \hookrightarrow y$	`\hookrightarrow`	$x \searrow y$	`\searrow`
$x \leftharpoonup y$	`\leftharpoonup`	$x \rightharpoonup y$	`\rightharpoonup`	$x \swarrow y$	`\swarrow`
$x \leftharpoondown y$	`\leftharpoondown`	$x \rightharpoondown y$	`\rightharpoondown`	$x \nwarrow y$	`\nwarrow`
$x \rightleftharpoons y$	`\rightleftharpoons`	$x \leadsto y$	`\leadsto`		

3.3.21 Miscellaneous Symbols Sans Serif

$x\ldots y$	`\ldots`	$x\cdots y$	`\cdots`	$x\vdots y$	`\vdots`	$x\ddots y$	`\ddots`
$x\aleph y$	`\aleph`	$x\prime y$	`\prime`	$x\forall y$	`\forall`	$x\infty y$	`\infty`
$x\hbar y$	`\hbar`	$x\emptyset y$	`\emptyset`	$x\exists y$	`\exists`	$x\Box y$	`\Box`
$x\imath y$	`\imath`	$x\nabla y$	`\nabla`	$x\neg y$	`\neg`	$x\Diamond y$	`\Diamond`
$x\jmath y$	`\jmath`	$x\surd y$	`\surd`	$x\flat y$	`\flat`	$x\triangle y$	`\triangle`
$x\ell y$	`\ell`	$x\top y$	`\top`	$x\natural y$	`\natural`	$x\clubsuit y$	`\clubsuit`
$x\wp y$	`\wp`	$x\bot y$	`\bot`	$x\sharp y$	`\sharp`	$x\diamondsuit y$	`\diamondsuit`
$x\Re y$	`\Re`	$x\| y$	`|`	$x\backslash y$	`\backslash`	$x\heartsuit y$	`\heartsuit`
$x\Im y$	`\Im`	$x\angle y$	`\angle`	$x\partial y$	`\partial`	$x\spadesuit y$	`\spadesuit`
$x\mho y$	`\mho`	$x.y$	`.`	$x\vert y$	`|`	$x!y$	`!`

3.3.22 Variable-Sized Operators Sans Serif

$x\sum y$	`\sum`	$x\bigcap y$	`\bigcap`	$x\bigodot y$	`\bigodot`
$x\prod y$	`\prod`	$x\bigcup y$	`\bigcup`	$x\bigotimes y$	`\bigotimes`
$x\coprod y$	`\coprod`	$x\bigsqcup y$	`\bigsqcup`	$x\bigoplus y$	`\bigoplus`
$x\int y$	`\int`	$x\bigvee y$	`\bigvee`	$x\biguplus y$	`\biguplus`
$x\oint y$	`\oint`	$x\bigwedge y$	`\bigwedge`		

3.3.23 Log-Like Operators Sans Serif

$x\arccos y$	$x\cos y$	$x\csc y$	$x\exp y$	$x\ker y$	$x\limsup y$	$x\min y$	$x\sinh y$
$x\arcsin y$	$x\cosh y$	$x\deg y$	$x\gcd y$	$x\lg y$	$x\ln y$	$x\Pr y$	$x\sup y$
$x\arctan y$	$x\cot y$	$x\det y$	$x\hom y$	$x\lim y$	$x\log y$	$x\sec y$	$x\tan y$
$x\arg y$	$x\coth y$	$x\dim y$	$x\inf y$	$x\liminf y$	$x\max y$	$x\sin y$	$x\tanh y$

3.3.24 Delimiters Sans Serif

$x(y$	`(`	$x)y$	`)`	$x\uparrow y$	`\uparrow`	$x\Uparrow y$	`\Uparrow`
$x[y$	`[`	$x]y$	`]`	$x\downarrow y$	`\downarrow`	$x\Downarrow y$	`\Downarrow`
$x\{y$	`\{`	$x\}y$	`\}`	$x\updownarrow y$	`\updownarrow`	$x\Updownarrow y$	`\Updownarrow`
$x\lfloor y$	`\lfloor`	$x\rfloor y$	`\rfloor`	$x\lceil y$	`\lceil`	$x\rceil y$	`\rceil`
$x\langle y$	`\langle`	$x\rangle y$	`\rangle`	x/y	`/`	$x\backslash y$	`\backslash`
$x\vert y$	`|`	$x\Vert y$	`|`				

3.3.25 Large Delimiters Sans Serif

$\rmoustache$	`\rmoustache`	$\lmoustache$	`\lmoustache`	$\rgroup$	`\rgroup`	$\lgroup$	`\lgroup`
$\arrowvert$	`\arrowvert`	$\Arrowvert$	`\Arrowvert`	$\bracevert$	`\bracevert`		

3.3.26 Math Mode Accents Sans Serif

$\hat{a}$	\hat{a}	$\acute{a}$	\acute{a}	$\bar{a}$	\bar{a}	$\dot{a}$	\dot{a}	$\breve{a}$	\breve{a}
$\check{a}$	\check{a}	$\grave{a}$	\grave{a}	$\vec{a}$	\vec{a}	$\ddot{a}$	\ddot{a}	$\tilde{a}$	\tilde{a}

3.3.27 Miscellaneous Constructions Sans Serif

$\widetilde{abc}$	\widetilde{abc}	$\widehat{abc}$	\widehat{abc}
$\overleftarrow{abc}$	\overleftarrow{abc}	$\overrightarrow{abc}$	\overrightarrow{abc}
$\overline{abc}$	\overline{abc}	$\underline{abc}$	\underline{abc}
$\overbrace{abc}$	\overbrace{abc}	$\underbrace{abc}$	\underbrace{abc}
$\sqrt{abc}$	\sqrt{abc}	$\sqrt[n]{abc}$	\sqrt[n]{abc}
f'	f'	$\frac{abc}{xyz}$	\frac{abc}{xyz}

3.3.28 AMS Delimiters Sans Serif

$x\ulcorner y$	\ulcorner	$x\urcorner y$	\urcorner	$x\llcorner y$	\llcorner	$x\lrcorner y$	\lrcorner

3.3.29 AMS Arrows Sans Serif

$x \dashrightarrow y$	\dashrightarrow	$x \dashleftarrow y$	\dashleftarrow
$x \leftleftarrows y$	\leftleftarrows	$x \leftrightarrows y$	\leftrightarrows
$x \Lleftarrow y$	\Lleftarrow	$x \twoheadleftarrow y$	\twoheadleftarrow
$x \leftarrowtail y$	\leftarrowtail	$x \looparrowleft y$	\looparrowleft
$x \leftrightharpoons y$	\leftrightharpoons	$x \curvearrowleft y$	\curvearrowleft
$x \circlearrowleft y$	\circlearrowleft	$x \Lsh y$	\Lsh
$x \upuparrows y$	\upuparrows	$x \upharpoonleft y$	\upharpoonleft
$x \downharpoonleft y$	\downharpoonleft	$x \multimap y$	\multimap
$x \leftrightsquigarrow y$	\leftrightsquigarrow	$x \rightrightarrows y$	\rightrightarrows
$x \rightleftarrows y$	\rightleftarrows	$x \rightrightarrows y$	\rightrightarrows
$x \rightleftarrows y$	\rightleftarrows	$x \twoheadrightarrow y$	\twoheadrightarrow
$x \rightarrowtail y$	\rightarrowtail	$x \looparrowright y$	\looparrowright
$x \rightleftharpoons y$	\rightleftharpoons	$x \curvearrowright y$	\curvearrowright
$x \circlearrowright y$	\circlearrowright	$x \Rsh y$	\Rsh
$x \downdownarrows y$	\downdownarrows	$x \upharpoonright y$	\upharpoonright
$x \downharpoonright y$	\downharpoonright	$x \rightsquigarrow y$	\rightsquigarrow

3.3.30 AMS Negated Arrows Sans Serif

$x \nleftarrow y$	\nleftarrow	$x \nrightarrow y$	\nrightarrow
$x \nLeftarrow y$	\nLeftarrow	$x \nRightarrow y$	\nRightarrow
$x \nleftrightarrow y$	\nleftrightarrow	$x \nLeftrightarrow y$	\nLeftrightarrow

3.3.31 AMS Greek Sans Serif

$x\digamma y$ \digamma $x\varkappa y$ \varkappa

3.3.32 AMS Hebrew Sans Serif

$x\beth y$ \beth $x\daleth y$ \daleth $x\gimel y$ \gimel

3.3.33 AMS Miscellaneous Sans Serif

$x\hbar y$	\hbar	$x\hslash y$	\hslash
$x \vartriangle y$	\vartriangle	$x\triangledown y$	\triangledown
$x\square y$	\square	$x\lozenge y$	\lozenge
$x\circledS y$	\circledS	$x\angle y$	\angle
$x\measuredangle y$	\measuredangle	$x\nexists y$	\nexists
$x\mho y$	\mho	$x\Finv y$	\Finv[u]
$x\Game y$	\Game[u]	$x\Bbbk y$	\Bbbk[u]
$x\backprime y$	\backprime	$x\varnothing y$	\varnothing
$x\blacktriangle y$	\blacktriangle	$x\blacktriangledown y$	\blacktriangledown
$x\blacksquare y$	\blacksquare	$x\blacklozenge y$	\blacklozenge
$x\bigstar y$	\bigstar	$x\sphericalangle y$	\sphericalangle
$x\complement y$	\complement	$x\eth y$	\eth
$x\diagup y$	\diagup[u]	$x\diagdown y$	\diagdown[u]

[u] Not defined in amssymb.sty, define using the \newsymbol command.

3.3.34 AMS Binary Operators Sans Serif

$x \dotplus y$	\dotplus	$x \smallsetminus y$	\smallsetminus
$x \Cap y$	\Cap	$x \Cup y$	\Cup
$x \barwedge y$	\barwedge	$x \veebar y$	\veebar
$x \doublebarwedge y$	\doublebarwedge	$x \boxminus y$	\boxminus
$x \boxtimes y$	\boxtimes	$x \boxdot y$	\boxdot
$x \boxplus y$	\boxplus	$x \divideontimes y$	\divideontimes
$x \ltimes y$	\ltimes	$x \rtimes y$	\rtimes
$x \leftthreetimes y$	\leftthreetimes	$x \rightthreetimes y$	\rightthreetimes
$x \curlywedge y$	\curlywedge	$x \curlyvee y$	\curlyvee
$x \circleddash y$	\circleddash	$x \circledast y$	\circledast
$x \circledcirc y$	\circledcirc	$x \centerdot y$	\centerdot
$x \intercal y$	\intercal		

3.3.35 AMS Relations Sans Serif

$x \leqslant y$	`\leqslant`
$x \lesssim y$	`\lesssim`
$x \approxeq y$	`\approxeq`
$x \lll y$	`\lll`
$x \lesseqgtr y$	`\lesseqgtr`
$x \doteqdot y$	`\doteqdot`
$x \fallingdotseq y$	`\fallingdotseq`
$x \backsimeq y$	`\backsimeq`
$x \Subset y$	`\Subset`
$x \preccurlyeq y$	`\preccurlyeq`
$x \precsim y$	`\precsim`
$x \vartriangleleft y$	`\vartriangleleft`
$x \vDash y$	`\vDash`
$x \smallsmile y$	`\smallsmile`
$x \bumpeq y$	`\bumpeq`
$x \geqq y$	`\geqq`
$x \eqslantgtr y$	`\eqslantgtr`
$x \gtrapprox y$	`\gtrapprox`
$x \ggg y$	`\ggg`
$x \gtreqless y$	`\gtreqless`
$x \eqcirc y$	`\eqcirc`
$x \triangleq y$	`\triangleq`
$x \thickapprox y$	`\thickapprox`
$x \Supset y$	`\Supset`
$x \succcurlyeq y$	`\succcurlyeq`
$x \succsim y$	`\succsim`
$x \vartriangleright y$	`\vartriangleright`
$x \Vdash y$	`\Vdash`
$x \shortparallel y$	`\shortparallel`
$x \pitchfork y$	`\pitchfork`
$x \blacktriangleleft y$	`\blacktriangleleft`
$x \backepsilon y$	`\backepsilon`
$x \because y$	`\because`

3.3.36 AMS Negated Relations Sans Serif

$x \nless y$	`\nless`	$x \nleq y$	`\nleq`
$x \nleqslant y$	`\nleqslant`	$x \nleqq y$	`\nleqq`
$x \lneq y$	`\lneq`	$x \lneqq y$	`\lneqq`
$x \lvertneqq y$	`\lvertneqq`	$x \lnsim y$	`\lnsim`
$x \lnapprox y$	`\lnapprox`	$x \nprec y$	`\nprec`
$x \npreceq y$	`\npreceq`	$x \precnsim y$	`\precnsim`
$x \precnapprox y$	`\precnapprox`	$x \nsim y$	`\nsim`
$x \nshortmid y$	`\nshortmid`	$x \nmid y$	`\nmid`
$x \nvdash y$	`\nvdash`	$x \nvDash y$	`\nvDash`
$x \ntriangleleft y$	`\ntriangleleft`	$x \ntrianglelefteq y$	`\ntrianglelefteq`
$x \nsubseteq y$	`\nsubseteq`	$x \subsetneq y$	`\subsetneq`
$x \varsubsetneq y$	`\varsubsetneq`	$x \subsetneqq y$	`\subsetneqq`
$x \varsubsetneqq y$	`\varsubsetneqq`	$x \ngtr y$	`\ngtr`
$x \ngeq y$	`\ngeq`	$x \ngeqslant y$	`\ngeqslant`
$x \ngeqq y$	`\ngeqq`	$x \gneq y$	`\gneq`
$x \gneqq y$	`\gneqq`	$x \gvertneqq y$	`\gvertneqq`
$x \gnsim y$	`\gnsim`	$x \gnapprox y$	`\gnapprox`
$x \nsucc y$	`\nsucc`	$x \nsucceq y$	`\nsucceq`
$x \nsucceqq y$	`\nsucceqq`	$x \succnsim y$	`\succnsim`
$x \succnapprox y$	`\succnapprox`	$x \ncong y$	`\ncong`
$x \nshortparallel y$	`\nshortparallel`	$x \nparallel y$	`\nparallel`
$x \nvDash y$	`\nvDash`	$x \nVDash y$	`\nVDash`
$x \ntriangleright y$	`\ntriangleright`	$x \ntrianglerighteq y$	`\ntrianglerighteq`
$x \nsupseteq y$	`\nsupseteq`	$x \nsupseteqq y$	`\nsupseteqq`
$x \supsetneq y$	`\supsetneq`	$x \varsupsetneq y$	`\varsupsetneq`
$x \supsetneqq y$	`\supsetneqq`	$x \varsupsetneqq y$	`\varsupsetneqq`

3.3.37 Math “Torture” Test Sans Serif

Most of the following examples are taken from *The TEXbook* (Knuth, 1984, see https://ctan.org/pkg/texbook) and were adapted for LaTeX from Karl Berry’s torture test for plain TEX math fonts.

$x + y - z, \quad x + y * z, \quad z * y / z, \quad (x+y)(x-y) = x^2 - y^2,$

$x \times y \cdot z = [x\,y\,z], \quad x \circ y \bullet z, \quad x \cup y \cap z, \quad x \sqcup y \sqcap z,$

$x \vee y \wedge z, \quad x \pm y \mp z, \quad x = y/z, \quad x := y, \quad x \le y \ne z, \quad x \sim y \simeq z\, x \equiv y \not\equiv z, \quad x \subset y \subseteq z$

$\sin 2\theta = 2 \sin\theta \cos\theta, \quad O(n \log n \log n), \quad \Pr(X > x) = \exp(-x/\mu),$

$\bigl(x \in A(n) \bigm| x \in B(n)\bigr), \quad \bigcup_n X_n \bigm\| \bigcap_n Y_n$

In-text matrices $\bigl(\begin{smallmatrix} 1 & 1 \\ 0 & 1 \end{smallmatrix}\bigr)$ and $\bigl(\begin{smallmatrix} a & b & c \\ 1 & m & n \end{smallmatrix}\bigr)$.

$$a_0 + \cfrac{1}{a_1 + \cfrac{1}{a_2 + \cfrac{1}{a_3 + \cfrac{1}{a_4}}}}$$

$$\binom{p}{2} x^2 y^{p-2} - \frac{1}{1-x}\frac{1}{1-x^2} = \frac{a+1}{b}\bigg/\frac{c+1}{d}.$$

$$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}}$$

$$\sqrt[n]{1+\sqrt[k]{1+\sqrt[5]{1+\sqrt[4]{1+\sqrt[3]{1+x}}}}}$$

$$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2}\right)\left|\phi(x+\mathrm{i}y)\right|^2 = 0$$

$$\pi(n) = \sum_{m=2}^{n}\left\lfloor\left(\sum_{k=1}^{m-1}\lfloor(m/k)\big/\lceil m/k\rceil\rfloor\right)^{-1}\right\rfloor.$$

$$\int_0^\infty \frac{t-\mathrm{i}b}{t^2+b^2} e^{\mathrm{i}at}\,\mathrm{d}t = e^{ab}E_1(ab), \quad a,b>0.$$

$$\boldsymbol{A} \coloneqq \begin{pmatrix} x-\lambda & 1 & 0 \\ 0 & x-\lambda & 1 \\ 0 & 0 & x-\lambda \end{pmatrix}.$$

$$\begin{pmatrix} a & b & c \\ d & e & f \end{pmatrix} \quad \begin{pmatrix} u & x \\ v & y \\ w & z \end{pmatrix}$$

$$\boldsymbol{A} = \begin{pmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \dots & a_{mn} \end{pmatrix}$$

$$\boldsymbol{M} = \begin{array}{c} \\ C \\ I \\ C' \end{array}\!\!\begin{array}{c} \begin{array}{ccc} C & I & C' \end{array} \\ \begin{pmatrix} 1 & 0 & 0 \\ b & 1-b & 0 \\ 0 & a & 1-a \end{pmatrix} \end{array}$$

$$\sum_{n=0}^{\infty} a_n z^n \quad \text{converges if} \quad |z| < \left(\limsup_{n\to\infty}\sqrt[n]{|a_n|}\right)^{-1}.$$

$$\frac{f(x+\Delta x)-f(x)}{\Delta x} \longrightarrow f'(x) \qquad \text{as } \Delta x \longrightarrow 0.$$

$$\|u_i\| = 1, \qquad u_i \cdot u_j = 0 \quad \text{if } i \neq j.$$

$$\text{The confluent image of} \quad \left\{ \begin{array}{c} \text{an arc} \\ \text{a circle} \\ \text{a fan} \end{array} \right\} \quad \text{is} \quad \left\{ \begin{array}{c} \text{an arc} \\ \text{an arc or a circle} \\ \text{a fan or an arc} \end{array} \right\}.$$

$$\begin{aligned} T(n) \ \leq \ T(2^{\lceil \lg n \rceil}) \ &\leq \ c(3^{\lceil \lg n \rceil} - 2^{\lceil \lg n \rceil}) \\ &< \ 3c \cdot 3^{\lg n} \\ &= \ 3c\, n^{\lg 3}. \end{aligned}$$

$$\begin{aligned} (x+y)(x-y) \ &= \ x^2 - xy + yx - y^2 \\ &= \ x^2 - y^2 \\ (x+y)^2 \ &= \ x^2 + 2xy + y^2. \end{aligned}$$

$$\begin{aligned} \left(\int\limits_{-\infty}^{\infty} e^{-x^2} \, dx \right)^2 \ &= \ \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} \, dx \, dy \\ &= \ \int_0^{2\pi} \int_0^{\infty} e^{-r^2} \, dr \, d\theta \\ &= \ \int_0^{2\pi} \left(e^{-\frac{r^2}{2}} \Big|_{r=0}^{r=\infty} \right) d\theta \\ &= \ \pi. \end{aligned}$$

$$\prod_{k \geq 0} \frac{1}{(1-q^k z)} = \sum_{n \geq 0} z^n \Bigg/ \prod_{1 \leq k \leq n} (1-q^k).$$

$$\sum_{\substack{0<i\leq m \\ 0<j\leq n}} p(i,j) \neq \sum_{i=1}^{p} \sum_{j=1}^{q} \sum_{k=1}^{r} a_{ij} b_{jk} c_{ki} \neq \sum_{\substack{1\leq i\leq p \\ 1\leq j\leq q \\ 1\leq k\leq r}} a_{ij} b_{jk} c_{ki}$$

$$\max_{1 \leq n \leq m} \log_2 P_n \quad \text{and} \quad \lim_{x \to 0} \frac{\sin x}{x} = 1$$

Inline math: $\max_{1 \leq n \leq m} \log_2 P_n$ and $\lim_{x \to 0} \frac{\sin x}{x} = 1$

$$p_1(n) = \lim_{m \to \infty} \sum_{\nu=0}^{\infty} \bigl(1 - \cos^{2m}(\nu!^n \pi/n)\bigr)$$

Inline math: $p_1(n) = \lim_{m \to \infty} \sum_{\nu=0}^{\infty} \bigl(1 - \cos^{2m}(\nu!^n \pi/n)\bigr)$

3.4 Math Test Sans Serif Bold

3.4.1 Overview Sans Serif Bold

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$; $\sigma_{\varepsilon}, c^{\alpha}$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha}\mathrm{b}\beta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\sigma$
mathup: $\mathrm{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathbf: $\boldsymbol{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$; $\sigma_{\varepsilon}, c^{\alpha}$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha}\mathrm{b}\beta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\sigma$
mathup: $\mathrm{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$; $\sigma_{\varepsilon}, c^{\alpha}$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha}\mathrm{b}\beta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\sigma$
mathup: $\mathrm{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

Default: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$; $\sigma_{\varepsilon}, c^{\alpha}$
mathnormal: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathrm: $\mathrm{a}\alpha\mathrm{\alpha}\mathrm{b}\beta\mathrm{G}\Gamma\Gamma\mathrm{P}\Pi\Sigma\sigma$
mathup: $\mathrm{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathit: $a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma$
mathbf: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfit: $\boldsymbol{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$
mathbfup: $\mathbf{a\alpha\alpha b\beta G\Gamma\Gamma P\Pi\Sigma\sigma}$

3.4.2 Formulas Sans Serif Bold

$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, \digamma, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega, F,$

$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, F, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega, F,$
$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, F, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega, F,$
$\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega, F, A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega, F,$
$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x\, f(x)\, dx = \left(\frac{27}{2}\right)$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x\, f(x)\, dx = \left(\frac{27}{2}\right)$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x\, f(x)\, dx = \left(\frac{27}{2}\right)$$

$\alpha a > 0, \beta b + (3 \times 27), \Gamma G = 7 < 8, \lambda$
$\lim_{v \to \infty} v(v) = \max_{s \in S}\{s \pm 3\gamma + y - 1\} = 4 \times 7$
$\hat{\beta} = (X'X)^{-1}X'y$

$$\lim_{N \to \infty} \sum_{i=0}^{N} x^i = \min_{x \in \mathbb{R}} S(x)$$

$$\int_{-\infty}^{\infty} x f(x)\,\mathrm{d}x = \binom{27}{2}$$

3.4.3 Math Alphabets Sans Serif Bold

Default

$$\begin{gathered}0, 1, 2, 3, 4, 5, 6, 7, 8, 9,\\ A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,\\ a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,\\ A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega,\\ \alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \theta, \pi, \rho, \varsigma, \phi,\end{gathered}$$

Math Normal (`\mathnormal`)

$$\begin{gathered}0, 1, 2, 3, 4, 5, 6, 7, 8, 9,\\ A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,\\ a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,\\ A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega,\\ \alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \theta, \pi, \rho, \varsigma, \phi,\end{gathered}$$

Math Italic (`\mathit`)

$$\begin{gathered}\mathit{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}\\ \mathit{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,}\\ \mathit{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,}\\ A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, Y, \Phi, X, \Psi, \Omega,\\ \alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \theta, \pi, \rho, \varsigma, \phi,\end{gathered}$$

Math Roman (`\mathrm`)

$$\begin{gathered}\mathrm{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}\\ \mathrm{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,}\\ \mathrm{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,}\\ \mathrm{A, B}, \Gamma, \Delta, \mathrm{E, Z, H}, \Theta, \mathrm{I, K}, \Lambda, \mathrm{M, N}, \Xi, \mathrm{O}, \Pi, \mathrm{P}, \Sigma, \mathrm{T}, \Upsilon, \Phi, \mathrm{X}, \Psi, \Omega,\\ \alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \phi, \chi, \psi, \omega, \varepsilon, \vartheta, \varpi, \varrho, \varsigma, \varphi,\end{gathered}$$

Math Bold (\mathbf)

$$\begin{aligned}
&\mathbf{0, 1, 2, 3, 4, 5, 6, 7, 8, 9,}\\
&\boldsymbol{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,}\\
&\boldsymbol{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z,}\\
&\boldsymbol{A, B, \Gamma, \Delta, E, Z, H, \Theta, I, K, \Lambda, M, N, \Xi, O, \Pi, P, \Sigma, T, \Upsilon, \Phi, X, \Psi, \Omega,}\\
&\boldsymbol{\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \varphi, \chi, \psi, \omega, \varepsilon, \vartheta, \varpi, \varrho, \varsigma, \phi,}
\end{aligned}$$

Caligraphic (\mathcal)

$$\mathcal{A}, \mathcal{B}, \mathcal{C}, \mathcal{D}, \mathcal{E}, \mathcal{F}, \mathcal{G}, \mathcal{H}, \mathcal{I}, \mathcal{J}, \mathcal{K}, \mathcal{L}, \mathcal{M}, \mathcal{N}, \mathcal{O}, \mathcal{P}, \mathcal{Q}, \mathcal{R}, \mathcal{S}, \mathcal{T}, \mathcal{U}, \mathcal{V}, \mathcal{W}, \mathcal{X}, \mathcal{Y}, \mathcal{Z},$$

Script (\mathscr)

$$\mathscr{A}, \mathscr{B}, \mathscr{C}, \mathscr{D}, \mathscr{E}, \mathscr{F}, \mathscr{G}, \mathscr{H}, \mathscr{I}, \mathscr{J}, \mathscr{K}, \mathscr{L}, \mathscr{M}, \mathscr{N}, \mathscr{O}, \mathscr{P}, \mathscr{Q}, \mathscr{R}, \mathscr{S}, \mathscr{T}, \mathscr{U}, \mathscr{V}, \mathscr{W}, \mathscr{X}, \mathscr{Y}, \mathscr{Z},$$

Fraktur (\mathfrak)

$$\begin{aligned}
&\mathfrak{A}, \mathfrak{B}, \mathfrak{C}, \mathfrak{D}, \mathfrak{E}, \mathfrak{F}, \mathfrak{G}, \mathfrak{H}, \mathfrak{I}, \mathfrak{J}, \mathfrak{K}, \mathfrak{L}, \mathfrak{M}, \mathfrak{N}, \mathfrak{O}, \mathfrak{P}, \mathfrak{Q}, \mathfrak{R}, \mathfrak{S}, \mathfrak{T}, \mathfrak{U}, \mathfrak{V}, \mathfrak{W}, \mathfrak{X}, \mathfrak{Y}, \mathfrak{Z},\\
&\mathfrak{a}, \mathfrak{b}, \mathfrak{c}, \mathfrak{d}, \mathfrak{e}, \mathfrak{f}, \mathfrak{g}, \mathfrak{h}, \mathfrak{i}, \mathfrak{j}, \mathfrak{k}, \mathfrak{l}, \mathfrak{m}, \mathfrak{n}, \mathfrak{o}, \mathfrak{p}, \mathfrak{q}, \mathfrak{r}, \mathfrak{s}, \mathfrak{t}, \mathfrak{u}, \mathfrak{v}, \mathfrak{w}, \mathfrak{x}, \mathfrak{y}, \mathfrak{z},
\end{aligned}$$

Blackboard Bold (\mathbb)

$$\mathbb{A}, \mathbb{B}, \mathbb{C}, \mathbb{D}, \mathbb{E}, \mathbb{F}, \mathbb{G}, \mathbb{H}, \mathbb{I}, \mathbb{J}, \mathbb{K}, \mathbb{L}, \mathbb{M}, \mathbb{N}, \mathbb{O}, \mathbb{P}, \mathbb{Q}, \mathbb{R}, \mathbb{S}, \mathbb{T}, \mathbb{U}, \mathbb{V}, \mathbb{W}, \mathbb{X}, \mathbb{Y}, \mathbb{Z},$$

3.4.4 Character Sidebearings Sans Serif Bold

Default

$$\begin{aligned}
&|A| + |B| + |C| + |D| + |E| + |F| + |G| + |H| + |I| + |J| + |K| + |L| + |M| +\\
&|N| + |O| + |P| + |Q| + |R| + |S| + |T| + |U| + |V| + |W| + |X| + |Y| + |Z| +\\
&|a| + |b| + |c| + |d| + |e| + |f| + |g| + |h| + |i| + |j| + |k| + |l| + |m| +\\
&|n| + |o| + |p| + |q| + |r| + |s| + |t| + |u| + |v| + |w| + |x| + |y| + |z| +\\
&|A| + |B| + |\Gamma| + |\Delta| + |E| + |Z| + |H| + |\Theta| + |I| + |K| + |\Lambda| + |M| +\\
&|N| + |\Xi| + |O| + |\Pi| + |P| + |\Sigma| + |T| + |\Upsilon| + |\Phi| + |X| + |\Psi| + |\Omega| +\\
&|\alpha| + |\beta| + |\gamma| + |\delta| + |\epsilon| + |\zeta| + |\eta| + |\theta| + |\iota| + |\kappa| + |\lambda| + |\mu| +\\
&|\nu| + |\xi| + |o| + |\pi| + |\rho| + |\sigma| + |\tau| + |\upsilon| + |\varphi| + |\chi| + |\psi| + |\omega| +\\
&|\varepsilon| + |\vartheta| + |\varpi| + |\varrho| + |\varsigma| + |\phi| +
\end{aligned}$$

Math Roman (\mathrm)

$$
|\mathrm{A}| + |\mathrm{B}| + |\mathrm{C}| + |\mathrm{D}| + |\mathrm{E}| + |\mathrm{F}| + |\mathrm{G}| + |\mathrm{H}| + |\mathrm{I}| + |\mathrm{J}| + |\mathrm{K}| + |\mathrm{L}| + |\mathrm{M}| +
$$
$$
|\mathrm{N}| + |\mathrm{O}| + |\mathrm{P}| + |\mathrm{Q}| + |\mathrm{R}| + |\mathrm{S}| + |\mathrm{T}| + |\mathrm{U}| + |\mathrm{V}| + |\mathrm{W}| + |\mathrm{X}| + |\mathrm{Y}| + |\mathrm{Z}| +
$$
$$
|\mathrm{a}| + |\mathrm{b}| + |\mathrm{c}| + |\mathrm{d}| + |\mathrm{e}| + |\mathrm{f}| + |\mathrm{g}| + |\mathrm{h}| + |\mathrm{i}| + |\mathrm{j}| + |\mathrm{k}| + |\mathrm{l}| + |\mathrm{m}| +
$$
$$
|\mathrm{n}| + |\mathrm{o}| + |\mathrm{p}| + |\mathrm{q}| + |\mathrm{r}| + |\mathrm{s}| + |\mathrm{t}| + |\mathrm{u}| + |\mathrm{v}| + |\mathrm{w}| + |\mathrm{x}| + |\mathrm{y}| + |\mathrm{z}| +
$$
$$
|\mathrm{A}| + |\mathrm{B}| + |\Gamma| + |\Delta| + |\mathrm{E}| + |\mathrm{Z}| + |\mathrm{H}| + |\Theta| + |\mathrm{I}| + |\mathrm{K}| + |\Lambda| + |\mathrm{M}| +
$$
$$
|\mathrm{N}| + |\Xi| + |\mathrm{O}| + |\Pi| + |\mathrm{P}| + |\Sigma| + |\mathrm{T}| + |\Upsilon| + |\Phi| + |\mathrm{X}| + |\Psi| + |\Omega| +
$$

Math Bold (\mathbf)

$$
|\boldsymbol{A}| + |\boldsymbol{B}| + |\boldsymbol{C}| + |\boldsymbol{D}| + |\boldsymbol{E}| + |\boldsymbol{F}| + |\boldsymbol{G}| + |\boldsymbol{H}| + |\boldsymbol{I}| + |\boldsymbol{J}| + |\boldsymbol{K}| + |\boldsymbol{L}| + |\boldsymbol{M}| +
$$
$$
|\boldsymbol{N}| + |\boldsymbol{O}| + |\boldsymbol{P}| + |\boldsymbol{Q}| + |\boldsymbol{R}| + |\boldsymbol{S}| + |\boldsymbol{T}| + |\boldsymbol{U}| + |\boldsymbol{V}| + |\boldsymbol{W}| + |\boldsymbol{X}| + |\boldsymbol{Y}| + |\boldsymbol{Z}| +
$$
$$
|\boldsymbol{a}| + |\boldsymbol{b}| + |\boldsymbol{c}| + |\boldsymbol{d}| + |\boldsymbol{e}| + |\boldsymbol{f}| + |\boldsymbol{g}| + |\boldsymbol{h}| + |\boldsymbol{i}| + |\boldsymbol{j}| + |\boldsymbol{k}| + |\boldsymbol{l}| + |\boldsymbol{m}| +
$$
$$
|\boldsymbol{n}| + |\boldsymbol{o}| + |\boldsymbol{p}| + |\boldsymbol{q}| + |\boldsymbol{r}| + |\boldsymbol{s}| + |\boldsymbol{t}| + |\boldsymbol{u}| + |\boldsymbol{v}| + |\boldsymbol{w}| + |\boldsymbol{x}| + |\boldsymbol{y}| + |\boldsymbol{z}| +
$$
$$
|\boldsymbol{A}| + |\boldsymbol{B}| + |\boldsymbol{\varGamma}| + |\boldsymbol{\varDelta}| + |\boldsymbol{E}| + |\boldsymbol{Z}| + |\boldsymbol{H}| + |\boldsymbol{\varTheta}| + |\boldsymbol{I}| + |\boldsymbol{K}| + |\boldsymbol{\varLambda}| + |\boldsymbol{M}| +
$$
$$
|\boldsymbol{N}| + |\boldsymbol{\varXi}| + |\boldsymbol{O}| + |\boldsymbol{\varPi}| + |\boldsymbol{P}| + |\boldsymbol{\varSigma}| + |\boldsymbol{T}| + |\boldsymbol{\varUpsilon}| + |\boldsymbol{\varPhi}| + |\boldsymbol{X}| + |\boldsymbol{\varPsi}| + |\boldsymbol{\varOmega}| +
$$

Math Calligraphic (\mathcal)

$$
|\mathcal{A}| + |\mathcal{B}| + |\mathcal{C}| + |\mathcal{D}| + |\mathcal{E}| + |\mathcal{F}| + |\mathcal{G}| + |\mathcal{H}| + |\mathcal{I}| + |\mathcal{J}| + |\mathcal{K}| + |\mathcal{L}| + |\mathcal{M}| +
$$
$$
|\mathcal{N}| + |\mathcal{O}| + |\mathcal{P}| + |\mathcal{Q}| + |\mathcal{R}| + |\mathcal{S}| + |\mathcal{T}| + |\mathcal{U}| + |\mathcal{V}| + |\mathcal{W}| + |\mathcal{X}| + |\mathcal{Y}| + |\mathcal{Z}| +
$$

3.4.5 Superscript Positioning Sans Serif Bold

Default

$$
A^2 + B^2 + C^2 + D^2 + E^2 + F^2 + G^2 + H^2 + I^2 + J^2 + K^2 + L^2 + M^2 +
$$
$$
N^2 + O^2 + P^2 + Q^2 + R^2 + S^2 + T^2 + U^2 + V^2 + W^2 + X^2 + Y^2 + Z^2 +
$$
$$
a^2 + b^2 + c^2 + d^2 + e^2 + f^2 + g^2 + h^2 + i^2 + j^2 + k^2 + l^2 + m^2 +
$$
$$
n^2 + o^2 + p^2 + q^2 + r^2 + s^2 + t^2 + u^2 + v^2 + w^2 + x^2 + y^2 + z^2 +
$$
$$
A^2 + B^2 + \varGamma^2 + \varDelta^2 + E^2 + Z^2 + H^2 + \varTheta^2 + I^2 + K^2 + \varLambda^2 + M^2 +
$$
$$
N^2 + \varXi^2 + O^2 + \varPi^2 + P^2 + \varSigma^2 + T^2 + \varUpsilon^2 + \varPhi^2 + X^2 + \varPsi^2 + \varOmega^2 +
$$
$$
\alpha^2 + \beta^2 + \gamma^2 + \delta^2 + \epsilon^2 + \zeta^2 + \eta^2 + \theta^2 + \iota^2 + \kappa^2 + \lambda^2 + \mu^2 +
$$
$$
\nu^2 + \xi^2 + o^2 + \pi^2 + \rho^2 + \sigma^2 + \tau^2 + \upsilon^2 + \phi^2 + \chi^2 + \psi^2 + \omega^2 +
$$
$$
\varepsilon^2 + \vartheta^2 + \varpi^2 + \varrho^2 + \varsigma^2 + \varphi^2 +
$$

Math Roman (\mathrm)

$$\mathrm{A}^2 + \mathrm{B}^2 + \mathrm{C}^2 + \mathrm{D}^2 + \mathrm{E}^2 + \mathrm{F}^2 + \mathrm{G}^2 + \mathrm{H}^2 + \mathrm{I}^2 + \mathrm{J}^2 + \mathrm{K}^2 + \mathrm{L}^2 + \mathrm{M}^2 +$$
$$\mathrm{N}^2 + \mathrm{O}^2 + \mathrm{P}^2 + \mathrm{Q}^2 + \mathrm{R}^2 + \mathrm{S}^2 + \mathrm{T}^2 + \mathrm{U}^2 + \mathrm{V}^2 + \mathrm{W}^2 + \mathrm{X}^2 + \mathrm{Y}^2 + \mathrm{Z}^2 +$$
$$\mathrm{a}^2 + \mathrm{b}^2 + \mathrm{c}^2 + \mathrm{d}^2 + \mathrm{e}^2 + \mathrm{f}^2 + \mathrm{g}^2 + \mathrm{h}^2 + \mathrm{i}^2 + \mathrm{j}^2 + \mathrm{k}^2 + \mathrm{l}^2 + \mathrm{m}^2 +$$
$$\mathrm{n}^2 + \mathrm{o}^2 + \mathrm{p}^2 + \mathrm{q}^2 + \mathrm{r}^2 + \mathrm{s}^2 + \mathrm{t}^2 + \mathrm{u}^2 + \mathrm{v}^2 + \mathrm{w}^2 + \mathrm{x}^2 + \mathrm{y}^2 + \mathrm{z}^2 +$$
$$\mathrm{A}^2 + \mathrm{B}^2 + \Gamma^2 + \Delta^2 + \mathrm{E}^2 + \mathrm{Z}^2 + \mathrm{H}^2 + \Theta^2 + \mathrm{I}^2 + \mathrm{K}^2 + \Lambda^2 + \mathrm{M}^2 +$$
$$\mathrm{N}^2 + \Xi^2 + \mathrm{O}^2 + \Pi^2 + \mathrm{P}^2 + \Sigma^2 + \mathrm{T}^2 + \Upsilon^2 + \Phi^2 + \mathrm{X}^2 + \Psi^2 + \Omega^2 +$$

Math Bold (\mathbf)

$$\mathbf{A}^2 + \mathbf{B}^2 + \mathbf{C}^2 + \mathbf{D}^2 + \mathbf{E}^2 + \mathbf{F}^2 + \mathbf{G}^2 + \mathbf{H}^2 + \mathbf{I}^2 + \mathbf{J}^2 + \mathbf{K}^2 + \mathbf{L}^2 + \mathbf{M}^2 +$$
$$\mathbf{N}^2 + \mathbf{O}^2 + \mathbf{P}^2 + \mathbf{Q}^2 + \mathbf{R}^2 + \mathbf{S}^2 + \mathbf{T}^2 + \mathbf{U}^2 + \mathbf{V}^2 + \mathbf{W}^2 + \mathbf{X}^2 + \mathbf{Y}^2 + \mathbf{Z}^2 +$$
$$\mathbf{a}^2 + \mathbf{b}^2 + \mathbf{c}^2 + \mathbf{d}^2 + \mathbf{e}^2 + \mathbf{f}^2 + \mathbf{g}^2 + \mathbf{h}^2 + \mathbf{i}^2 + \mathbf{j}^2 + \mathbf{k}^2 + \mathbf{l}^2 + \mathbf{m}^2 +$$
$$\mathbf{n}^2 + \mathbf{o}^2 + \mathbf{p}^2 + \mathbf{q}^2 + \mathbf{r}^2 + \mathbf{s}^2 + \mathbf{t}^2 + \mathbf{u}^2 + \mathbf{v}^2 + \mathbf{w}^2 + \mathbf{x}^2 + \mathbf{y}^2 + \mathbf{z}^2 +$$
$$\mathbf{A}^2 + \mathbf{B}^2 + \mathbf{\Gamma}^2 + \mathbf{\Delta}^2 + \mathbf{E}^2 + \mathbf{Z}^2 + \mathbf{H}^2 + \mathbf{\Theta}^2 + \mathbf{I}^2 + \mathbf{K}^2 + \mathbf{\Lambda}^2 + \mathbf{M}^2 +$$
$$\mathbf{N}^2 + \mathbf{\Xi}^2 + \mathbf{O}^2 + \mathbf{\Pi}^2 + \mathbf{P}^2 + \mathbf{\Sigma}^2 + \mathbf{T}^2 + \mathbf{\Upsilon}^2 + \mathbf{\Phi}^2 + \mathbf{X}^2 + \mathbf{\Psi}^2 + \mathbf{\Omega}^2 +$$

Math Calligraphic (\mathcal)

$$\mathcal{A}^2 + \mathcal{B}^2 + \mathcal{C}^2 + \mathcal{D}^2 + \mathcal{E}^2 + \mathcal{F}^2 + \mathcal{G}^2 + \mathcal{H}^2 + \mathcal{I}^2 + \mathcal{J}^2 + \mathcal{K}^2 + \mathcal{L}^2 + \mathcal{M}^2 +$$
$$\mathcal{N}^2 + \mathcal{O}^2 + \mathcal{P}^2 + \mathcal{Q}^2 + \mathcal{R}^2 + \mathcal{S}^2 + \mathcal{T}^2 + \mathcal{U}^2 + \mathcal{V}^2 + \mathcal{W}^2 + \mathcal{X}^2 + \mathcal{Y}^2 + \mathcal{Z}^2 +$$

3.4.6 Subscript Positioning Sans Serif Bold

Default

$$A_i + B_i + C_i + D_i + E_i + F_i + G_i + H_i + I_i + J_i + K_i + L_i + M_i +$$
$$N_i + O_i + P_i + Q_i + R_i + S_i + T_i + U_i + V_i + W_i + X_i + Y_i + Z_i +$$
$$a_i + b_i + c_i + d_i + e_i + f_i + g_i + h_i + i_i + j_i + k_i + l_i + m_i +$$
$$n_i + o_i + p_i + q_i + r_i + s_i + t_i + u_i + v_i + w_i + x_i + y_i + z_i +$$
$$A_i + B_i + \mathit{\Gamma}_i + \mathit{\Delta}_i + E_i + Z_i + H_i + \mathit{\Theta}_i + I_i + K_i + \mathit{\Lambda}_i + M_i +$$
$$N_i + \mathit{\Xi}_i + O_i + \mathit{\Pi}_i + P_i + \mathit{\Sigma}_i + T_i + \mathit{\Upsilon}_i + \mathit{\Phi}_i + X_i + \mathit{\Psi}_i + \mathit{\Omega}_i +$$
$$\alpha_i + \beta_i + \gamma_i + \delta_i + \epsilon_i + \zeta_i + \eta_i + \theta_i + \iota_i + \kappa_i + \lambda_i + \mu_i +$$
$$\nu_i + \xi_i + o_i + \pi_i + \rho_i + \sigma_i + \tau_i + \upsilon_i + \phi_i + \chi_i + \psi_i + \omega_i +$$
$$\varepsilon_i + \vartheta_i + \varpi_i + \varrho_i + \varsigma_i + \varphi_i +$$

Math Roman (`\mathrm`)

$$\mathrm{A}_i + \mathrm{B}_i + \mathrm{C}_i + \mathrm{D}_i + \mathrm{E}_i + \mathrm{F}_i + \mathrm{G}_i + \mathrm{H}_i + \mathrm{I}_i + \mathrm{J}_i + \mathrm{K}_i + \mathrm{L}_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \mathrm{O}_i + \mathrm{P}_i + \mathrm{Q}_i + \mathrm{R}_i + \mathrm{S}_i + \mathrm{T}_i + \mathrm{U}_i + \mathrm{V}_i + \mathrm{W}_i + \mathrm{X}_i + \mathrm{Y}_i + \mathrm{Z}_i +$$
$$\mathrm{a}_i + \mathrm{b}_i + \mathrm{c}_i + \mathrm{d}_i + \mathrm{e}_i + \mathrm{f}_i + \mathrm{g}_i + \mathrm{h}_i + \mathrm{i}_i + \mathrm{j}_i + \mathrm{k}_i + \mathrm{l}_i + \mathrm{m}_i +$$
$$\mathrm{n}_i + \mathrm{o}_i + \mathrm{p}_i + \mathrm{q}_i + \mathrm{r}_i + \mathrm{s}_i + \mathrm{t}_i + \mathrm{u}_i + \mathrm{v}_i + \mathrm{w}_i + \mathrm{x}_i + \mathrm{y}_i + \mathrm{z}_i +$$
$$\mathrm{A}_i + \mathrm{B}_i + \Gamma_i + \Delta_i + \mathrm{E}_i + \mathrm{Z}_i + \mathrm{H}_i + \Theta_i + \mathrm{I}_i + \mathrm{K}_i + \Lambda_i + \mathrm{M}_i +$$
$$\mathrm{N}_i + \Xi_i + \mathrm{O}_i + \Pi_i + \mathrm{P}_i + \Sigma_i + \mathrm{T}_i + \Upsilon_i + \Phi_i + \mathrm{X}_i + \Psi_i + \Omega_i +$$

Math Bold (`\mathbf`)

$$\mathbf{A}_i + \mathbf{B}_i + \mathbf{C}_i + \mathbf{D}_i + \mathbf{E}_i + \mathbf{F}_i + \mathbf{G}_i + \mathbf{H}_i + \mathbf{I}_i + \mathbf{J}_i + \mathbf{K}_i + \mathbf{L}_i + \mathbf{M}_i +$$
$$\mathbf{N}_i + \mathbf{O}_i + \mathbf{P}_i + \mathbf{Q}_i + \mathbf{R}_i + \mathbf{S}_i + \mathbf{T}_i + \mathbf{U}_i + \mathbf{V}_i + \mathbf{W}_i + \mathbf{X}_i + \mathbf{Y}_i + \mathbf{Z}_i +$$
$$\mathbf{a}_i + \mathbf{b}_i + \mathbf{c}_i + \mathbf{d}_i + \mathbf{e}_i + \mathbf{f}_i + \mathbf{g}_i + \mathbf{h}_i + \mathbf{i}_i + \mathbf{j}_i + \mathbf{k}_i + \mathbf{l}_i + \mathbf{m}_i +$$
$$\mathbf{n}_i + \mathbf{o}_i + \mathbf{p}_i + \mathbf{q}_i + \mathbf{r}_i + \mathbf{s}_i + \mathbf{t}_i + \mathbf{u}_i + \mathbf{v}_i + \mathbf{w}_i + \mathbf{x}_i + \mathbf{y}_i + \mathbf{z}_i +$$
$$\mathbf{A}_i + \mathbf{B}_i + \boldsymbol{\Gamma}_i + \boldsymbol{\Delta}_i + \mathbf{E}_i + \mathbf{Z}_i + \mathbf{H}_i + \boldsymbol{\Theta}_i + \mathbf{I}_i + \mathbf{K}_i + \boldsymbol{\Lambda}_i + \mathbf{M}_i +$$
$$\mathbf{N}_i + \boldsymbol{\Xi}_i + \mathbf{O}_i + \boldsymbol{\Pi}_i + \mathbf{P}_i + \boldsymbol{\Sigma}_i + \mathbf{T}_i + \boldsymbol{\Upsilon}_i + \boldsymbol{\Phi}_i + \mathbf{X}_i + \boldsymbol{\Psi}_i + \boldsymbol{\Omega}_i +$$

Math Calligraphic (`\mathcal`)

$$\mathcal{A}_i + \mathcal{B}_i + \mathcal{C}_i + \mathcal{D}_i + \mathcal{E}_i + \mathcal{F}_i + \mathcal{G}_i + \mathcal{H}_i + \mathcal{I}_i + \mathcal{J}_i + \mathcal{K}_i + \mathcal{L}_i + \mathcal{M}_i +$$
$$\mathcal{N}_i + \mathcal{O}_i + \mathcal{P}_i + \mathcal{Q}_i + \mathcal{R}_i + \mathcal{S}_i + \mathcal{T}_i + \mathcal{U}_i + \mathcal{V}_i + \mathcal{W}_i + \mathcal{X}_i + \mathcal{Y}_i + \mathcal{Z}_i +$$

3.4.7 Accent Positioning Sans Serif Bold

Default

$$\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} +$$
$$\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} +$$
$$\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} +$$
$$\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{i} + \hat{j} + \hat{k} + \hat{l} + \hat{m} +$$
$$\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} +$$
$$\hat{A} + \hat{B} + \hat{\Gamma} + \hat{\Delta} + \hat{E} + \hat{Z} + \hat{H} + \hat{\Theta} + \hat{I} + \hat{K} + \hat{\Lambda} + \hat{M} +$$
$$\hat{N} + \hat{\Xi} + \hat{O} + \hat{\Pi} + \hat{P} + \hat{\Sigma} + \hat{T} + \hat{Y} + \hat{\Phi} + \hat{X} + \hat{\Psi} + \hat{\Omega} +$$
$$\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\iota} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} +$$
$$\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} +$$
$$\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +$$

Math Italic (`\mathit`)

$$\hat{\mathit{0}} + \hat{\mathit{1}} + \hat{\mathit{2}} + \hat{\mathit{3}} + \hat{\mathit{4}} + \hat{\mathit{5}} + \hat{\mathit{6}} + \hat{\mathit{7}} + \hat{\mathit{8}} + \hat{\mathit{9}} +$$
$$\hat{A} + \hat{B} + \hat{C} + \hat{D} + \hat{E} + \hat{F} + \hat{G} + \hat{H} + \hat{I} + \hat{J} + \hat{K} + \hat{L} + \hat{M} +$$
$$\hat{N} + \hat{O} + \hat{P} + \hat{Q} + \hat{R} + \hat{S} + \hat{T} + \hat{U} + \hat{V} + \hat{W} + \hat{X} + \hat{Y} + \hat{Z} +$$
$$\hat{a} + \hat{b} + \hat{c} + \hat{d} + \hat{e} + \hat{f} + \hat{g} + \hat{h} + \hat{i} + \hat{j} + \hat{k} + \hat{l} + \hat{m} + \hat{\ell} + \hat{\wp} + \hat{\imath} + \hat{\jmath} + \tilde{\imath}$$
$$\hat{n} + \hat{o} + \hat{p} + \hat{q} + \hat{r} + \hat{s} + \hat{t} + \hat{u} + \hat{v} + \hat{w} + \hat{x} + \hat{y} + \hat{z} +$$
$$\hat{A} + \hat{B} + \hat{\mathit{\Gamma}} + \hat{\mathit{\Delta}} + \hat{E} + \hat{Z} + \hat{H} + \hat{\mathit{\Theta}} + \hat{I} + \hat{K} + \hat{\mathit{\Lambda}} + \hat{M} +$$
$$\hat{N} + \hat{\mathit{\Xi}} + \hat{O} + \hat{\mathit{\Pi}} + \hat{P} + \hat{\mathit{\Sigma}} + \hat{T} + \hat{\mathit{\Upsilon}} + \hat{\mathit{\Phi}} + \hat{X} + \hat{\mathit{\Psi}} + \hat{\mathit{\Omega}} +$$
$$\hat{\alpha} + \hat{\beta} + \hat{\gamma} + \hat{\delta} + \hat{\epsilon} + \hat{\zeta} + \hat{\eta} + \hat{\theta} + \hat{\iota} + \hat{\kappa} + \hat{\lambda} + \hat{\mu} +$$
$$\hat{\nu} + \hat{\xi} + \hat{o} + \hat{\pi} + \hat{\rho} + \hat{\sigma} + \hat{\tau} + \hat{\upsilon} + \hat{\phi} + \hat{\chi} + \hat{\psi} + \hat{\omega} +$$
$$\hat{\varepsilon} + \hat{\vartheta} + \hat{\varpi} + \hat{\varrho} + \hat{\varsigma} + \hat{\varphi} +$$

Math Roman (`\mathrm`)

$$\hat{0} + \hat{1} + \hat{2} + \hat{3} + \hat{4} + \hat{5} + \hat{6} + \hat{7} + \hat{8} + \hat{9} +$$
$$\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\mathrm{C}} + \hat{\mathrm{D}} + \hat{\mathrm{E}} + \hat{\mathrm{F}} + \hat{\mathrm{G}} + \hat{\mathrm{H}} + \hat{\mathrm{I}} + \hat{\mathrm{J}} + \hat{\mathrm{K}} + \hat{\mathrm{L}} + \hat{\mathrm{M}} +$$
$$\hat{\mathrm{N}} + \hat{\mathrm{O}} + \hat{\mathrm{P}} + \hat{\mathrm{Q}} + \hat{\mathrm{R}} + \hat{\mathrm{S}} + \hat{\mathrm{T}} + \hat{\mathrm{U}} + \hat{\mathrm{V}} + \hat{\mathrm{W}} + \hat{\mathrm{X}} + \hat{\mathrm{Y}} + \hat{\mathrm{Z}} +$$
$$\hat{\mathrm{a}} + \hat{\mathrm{b}} + \hat{\mathrm{c}} + \hat{\mathrm{d}} + \hat{\mathrm{e}} + \hat{\mathrm{f}} + \hat{\mathrm{g}} + \hat{\mathrm{h}} + \hat{\mathrm{i}} + \hat{\mathrm{j}} + \hat{\mathrm{k}} + \hat{\mathrm{l}} + \hat{\mathrm{m}} +$$
$$\hat{\mathrm{n}} + \hat{\mathrm{o}} + \hat{\mathrm{p}} + \hat{\mathrm{q}} + \hat{\mathrm{r}} + \hat{\mathrm{s}} + \hat{\mathrm{t}} + \hat{\mathrm{u}} + \hat{\mathrm{v}} + \hat{\mathrm{w}} + \hat{\mathrm{x}} + \hat{\mathrm{y}} + \hat{\mathrm{z}} +$$
$$\hat{\mathrm{A}} + \hat{\mathrm{B}} + \hat{\Gamma} + \hat{\Delta} + \hat{\mathrm{E}} + \hat{\mathrm{Z}} + \hat{\mathrm{H}} + \hat{\Theta} + \hat{\mathrm{I}} + \hat{\mathrm{K}} + \hat{\Lambda} + \hat{\mathrm{M}} +$$
$$\hat{\mathrm{N}} + \hat{\Xi} + \hat{\mathrm{O}} + \hat{\Pi} + \hat{\mathrm{P}} + \hat{\Sigma} + \hat{\mathrm{T}} + \hat{\Upsilon} + \hat{\Phi} + \hat{\mathrm{X}} + \hat{\Psi} + \hat{\Omega} +$$

Math Bold (`\mathbf`)

$$\hat{\mathbf{0}} + \hat{\mathbf{1}} + \hat{\mathbf{2}} + \hat{\mathbf{3}} + \hat{\mathbf{4}} + \hat{\mathbf{5}} + \hat{\mathbf{6}} + \hat{\mathbf{7}} + \hat{\mathbf{8}} + \hat{\mathbf{9}} +$$
$$\hat{\mathbf{A}} + \hat{\mathbf{B}} + \hat{\mathbf{C}} + \hat{\mathbf{D}} + \hat{\mathbf{E}} + \hat{\mathbf{F}} + \hat{\mathbf{G}} + \hat{\mathbf{H}} + \hat{\mathbf{I}} + \hat{\mathbf{J}} + \hat{\mathbf{K}} + \hat{\mathbf{L}} + \hat{\mathbf{M}} +$$
$$\hat{\mathbf{N}} + \hat{\mathbf{O}} + \hat{\mathbf{P}} + \hat{\mathbf{Q}} + \hat{\mathbf{R}} + \hat{\mathbf{S}} + \hat{\mathbf{T}} + \hat{\mathbf{U}} + \hat{\mathbf{V}} + \hat{\mathbf{W}} + \hat{\mathbf{X}} + \hat{\mathbf{Y}} + \hat{\mathbf{Z}} +$$
$$\hat{\mathbf{a}} + \hat{\mathbf{b}} + \hat{\mathbf{c}} + \hat{\mathbf{d}} + \hat{\mathbf{e}} + \hat{\mathbf{f}} + \hat{\mathbf{g}} + \hat{\mathbf{h}} + \hat{\mathbf{i}} + \hat{\mathbf{j}} + \hat{\mathbf{k}} + \hat{\mathbf{l}} + \hat{\mathbf{m}} +$$
$$\hat{\mathbf{n}} + \hat{\mathbf{o}} + \hat{\mathbf{p}} + \hat{\mathbf{q}} + \hat{\mathbf{r}} + \hat{\mathbf{s}} + \hat{\mathbf{t}} + \hat{\mathbf{u}} + \hat{\mathbf{v}} + \hat{\mathbf{w}} + \hat{\mathbf{x}} + \hat{\mathbf{y}} + \hat{\mathbf{z}} +$$
$$\hat{\mathbf{A}} + \hat{\mathbf{B}} + \hat{\mathbf{\Gamma}} + \hat{\mathbf{\Delta}} + \hat{\mathbf{E}} + \hat{\mathbf{Z}} + \hat{\mathbf{H}} + \hat{\mathbf{\Theta}} + \hat{\mathbf{I}} + \hat{\mathbf{K}} + \hat{\mathbf{\Lambda}} + \hat{\mathbf{M}} +$$
$$\hat{\mathbf{N}} + \hat{\mathbf{\Xi}} + \hat{\mathbf{O}} + \hat{\mathbf{\Pi}} + \hat{\mathbf{P}} + \hat{\mathbf{\Sigma}} + \hat{\mathbf{T}} + \hat{\mathbf{\Upsilon}} + \hat{\mathbf{\Phi}} + \hat{\mathbf{X}} + \hat{\mathbf{\Psi}} + \hat{\mathbf{\Omega}} +$$

Math Calligraphic (`\mathcal`)

$$\hat{\mathcal{A}} + \hat{\mathcal{B}} + \hat{\mathcal{C}} + \hat{\mathcal{D}} + \hat{\mathcal{E}} + \hat{\mathcal{F}} + \hat{\mathcal{G}} + \hat{\mathcal{H}} + \hat{\mathcal{I}} + \hat{\mathcal{J}} + \hat{\mathcal{K}} + \hat{\mathcal{L}} + \hat{\mathcal{M}} +$$
$$\hat{\mathcal{N}} + \hat{\mathcal{O}} + \hat{\mathcal{P}} + \hat{\mathcal{Q}} + \hat{\mathcal{R}} + \hat{\mathcal{S}} + \hat{\mathcal{T}} + \hat{\mathcal{U}} + \hat{\mathcal{V}} + \hat{\mathcal{W}} + \hat{\mathcal{X}} + \hat{\mathcal{Y}} + \hat{\mathcal{Z}} +$$

3.4.8 Differentials Sans Serif Bold

$$
\begin{gathered}
\boldsymbol{dA + dB + dC + dD + dE + dF + dG + dH + dI + dJ + dK + dL + dM +}\\
\boldsymbol{dN + dO + dP + dQ + dR + dS + dT + dU + dV + dW + dX + dY + dZ +}\\
\boldsymbol{da + db + dc + dd + de + df + dg + dh + di + dj + dk + dl + dm +}\\
\boldsymbol{dn + do + dp + dq + dr + ds + dt + du + dv + dw + dx + dy + dz +}\\
\boldsymbol{dA + dB + d\mathit{\Gamma} + d\mathit{\Delta} + dE + dZ + dH + d\mathit{\Theta} + dI + dK + d\mathit{\Lambda} + dM +}\\
\boldsymbol{dN + d\mathit{\Xi} + dO + d\mathit{\Pi} + dP + d\mathit{\Sigma} + dT + dY + d\mathit{\Phi} + dX + d\mathit{\Psi} + d\mathit{\Omega} +}\\
\boldsymbol{d\alpha + d\beta + d\gamma + d\delta + d\epsilon + d\zeta + d\eta + d\theta + d\iota + d\kappa + d\lambda + d\mu +}\\
\boldsymbol{d\nu + d\xi + do + d\pi + d\rho + d\sigma + d\tau + d\upsilon + d\phi + d\chi + d\psi + d\omega +}\\
\boldsymbol{d\varepsilon + d\vartheta + d\varpi + d\varrho + d\varsigma + d\varphi +}\\
\boldsymbol{dA + dB + d\Gamma + d\Delta + dE + dZ + dH + d\Theta + dI + dK + d\Lambda + dM +}\\
\boldsymbol{dN + d\Xi + dO + d\Pi + dP + d\Sigma + dT + d\Upsilon + d\Phi + dX + d\Psi + d\Omega +}
\end{gathered}
$$

$$
\begin{gathered}
\mathbf{dA + dB + dC + dD + dE + dF + dG + dH + dI + dJ + dK + dL + dM +}\\
\mathbf{dN + dO + dP + dQ + dR + dS + dT + dU + dV + dW + dX + dY + dZ +}\\
\mathbf{da + db + dc + dd + de + df + dg + dh + di + dj + dk + dl + dm +}\\
\mathbf{dn + do + dp + dq + dr + ds + dt + du + dv + dw + dx + dy + dz +}\\
\mathbf{dA + dB + d\mathit{\Gamma} + d\mathit{\Delta} + dE + dZ + dH + d\mathit{\Theta} + dI + dK + d\mathit{\Lambda} + dM +}\\
\mathbf{dN + d\mathit{\Xi} + dO + d\mathit{\Pi} + dP + d\mathit{\Sigma} + dT + dY + d\mathit{\Phi} + dX + d\mathit{\Psi} + d\mathit{\Omega} +}\\
\mathbf{d}\boldsymbol{\alpha} + \mathbf{d}\boldsymbol{\beta} + \mathbf{d}\boldsymbol{\gamma} + \mathbf{d}\boldsymbol{\delta} + \mathbf{d}\boldsymbol{\epsilon} + \mathbf{d}\boldsymbol{\zeta} + \mathbf{d}\boldsymbol{\eta} + \mathbf{d}\boldsymbol{\theta} + \mathbf{d}\boldsymbol{\iota} + \mathbf{d}\boldsymbol{\kappa} + \mathbf{d}\boldsymbol{\lambda} + \mathbf{d}\boldsymbol{\mu} +\\
\mathbf{d}\boldsymbol{\nu} + \mathbf{d}\boldsymbol{\xi} + \mathbf{do} + \mathbf{d}\boldsymbol{\pi} + \mathbf{d}\boldsymbol{\rho} + \mathbf{d}\boldsymbol{\sigma} + \mathbf{d}\boldsymbol{\tau} + \mathbf{d}\boldsymbol{\upsilon} + \mathbf{d}\boldsymbol{\phi} + \mathbf{d}\boldsymbol{\chi} + \mathbf{d}\boldsymbol{\psi} + \mathbf{d}\boldsymbol{\omega} +\\
\mathbf{d}\boldsymbol{\varepsilon} + \mathbf{d}\boldsymbol{\vartheta} + \mathbf{d}\boldsymbol{\varpi} + \mathbf{d}\boldsymbol{\varrho} + \mathbf{d}\boldsymbol{\varsigma} + \mathbf{d}\boldsymbol{\varphi} +\\
\mathbf{dA + dB + d\Gamma + d\Delta + dE + dZ + dH + d\Theta + dI + dK + d\Lambda + dM +}\\
\mathbf{dN + d\Xi + dO + d\Pi + dP + d\Sigma + dT + d\Upsilon + d\Phi + dX + d\Psi + d\Omega +}
\end{gathered}
$$

$$\partial A + \partial B + \partial C + \partial D + \partial E + \partial F + \partial G + \partial H + \partial I + \partial J + \partial K + \partial L + \partial M +$$
$$\partial N + \partial O + \partial P + \partial Q + \partial R + \partial S + \partial T + \partial U + \partial V + \partial W + \partial X + \partial Y + \partial Z +$$
$$\partial a + \partial b + \partial c + \partial d + \partial e + \partial f + \partial g + \partial h + \partial i + \partial j + \partial k + \partial l + \partial m +$$
$$\partial n + \partial o + \partial p + \partial q + \partial r + \partial s + \partial t + \partial u + \partial v + \partial w + \partial x + \partial y + \partial z +$$
$$\partial A + \partial B + \partial \mathit{\Gamma} + \partial \mathit{\Delta} + \partial E + \partial Z + \partial H + \partial \mathit{\Theta} + \partial I + \partial K + \partial \mathit{\Lambda} + \partial M +$$
$$\partial N + \partial \mathit{\Xi} + \partial O + \partial \mathit{\Pi} + \partial P + \partial \mathit{\Sigma} + \partial T + \partial \mathit{\Upsilon} + \partial \mathit{\Phi} + \partial X + \partial \mathit{\Psi} + \partial \mathit{\Omega} +$$
$$\partial \alpha + \partial \beta + \partial \gamma + \partial \delta + \partial \epsilon + \partial \zeta + \partial \eta + \partial \theta + \partial \iota + \partial \kappa + \partial \lambda + \partial \mu +$$
$$\partial \nu + \partial \xi + \partial o + \partial \pi + \partial \rho + \partial \sigma + \partial \tau + \partial \upsilon + \partial \phi + \partial \chi + \partial \psi + \partial \omega +$$
$$\partial \varepsilon + \partial \vartheta + \partial \varpi + \partial \varrho + \partial \varsigma + \partial \varphi +$$
$$\partial \mathrm{A} + \partial \mathrm{B} + \partial \Gamma + \partial \Delta + \partial \mathrm{E} + \partial \mathrm{Z} + \partial \mathrm{H} + \partial \Theta + \partial \mathrm{I} + \partial \mathrm{K} + \partial \Lambda + \partial \mathrm{M} +$$
$$\partial \mathrm{N} + \partial \Xi + \partial \mathrm{O} + \partial \Pi + \partial \mathrm{P} + \partial \Sigma + \partial \mathrm{T} + \partial \Upsilon + \partial \Phi + \partial \mathrm{X} + \partial \Psi + \partial \Omega +$$

3.4.9 Slash Kerning Sans Serif Bold

$$1/A + 1/B + 1/C + 1/D + 1/E + 1/F + 1/G + 1/H + 1/I + 1/J + 1/K + 1/L + 1/M +$$
$$1/N + 1/O + 1/P + 1/Q + 1/R + 1/S + 1/T + 1/U + 1/V + 1/W + 1/X + 1/Y + 1/Z +$$
$$1/a + 1/b + 1/c + 1/d + 1/e + 1/f + 1/g + 1/h + 1/i + 1/j + 1/k + 1/l + 1/m +$$
$$1/n + 1/o + 1/p + 1/q + 1/r + 1/s + 1/t + 1/u + 1/v + 1/w + 1/x + 1/y + 1/z +$$
$$1/A + 1/B + 1/\mathit{\Gamma} + 1/\mathit{\Delta} + 1/E + 1/Z + 1/H + 1/\mathit{\Theta} + 1/I + 1/K + 1/\mathit{\Lambda} + 1/M +$$
$$1/N + 1/\mathit{\Xi} + 1/O + 1/\mathit{\Pi} + 1/P + 1/\mathit{\Sigma} + 1/T + 1/\mathit{\Upsilon} + 1/\mathit{\Phi} + 1/X + 1/\mathit{\Psi} + 1/\mathit{\Omega} +$$
$$1/\alpha + 1/\beta + 1/\gamma + 1/\delta + 1/\epsilon + 1/\zeta + 1/\eta + 1/\theta + 1/\iota + 1/\kappa + 1/\lambda + 1/\mu +$$
$$1/\nu + 1/\xi + 1/o + 1/\pi + 1/\rho + 1/\sigma + 1/\tau + 1/\upsilon + 1/\phi + 1/\chi + 1/\psi + 1/\omega +$$
$$1/\varepsilon + 1/\vartheta + 1/\varpi + 1/\varrho + 1/\varsigma + 1/\varphi +$$

$$A/2 + B/2 + C/2 + D/2 + E/2 + F/2 + G/2 + H/2 + I/2 + J/2 + K/2 + L/2 + M/2 +$$
$$N/2 + O/2 + P/2 + Q/2 + R/2 + S/2 + T/2 + U/2 + V/2 + W/2 + X/2 + Y/2 + Z/2 +$$
$$a/2 + b/2 + c/2 + d/2 + e/2 + f/2 + g/2 + h/2 + i/2 + j/2 + k/2 + l/2 + m/2 +$$
$$n/2 + o/2 + p/2 + q/2 + r/2 + s/2 + t/2 + u/2 + v/2 + w/2 + x/2 + y/2 + z/2 +$$
$$A/2 + B/2 + \mathit{\Gamma}/2 + \mathit{\Delta}/2 + E/2 + Z/2 + H/2 + \mathit{\Theta}/2 + I/2 + K/2 + \mathit{\Lambda}/2 + M/2 +$$
$$N/2 + \mathit{\Xi}/2 + O/2 + \mathit{\Pi}/2 + P/2 + \mathit{\Sigma}/2 + T/2 + \mathit{\Upsilon}/2 + \mathit{\Phi}/2 + X/2 + \mathit{\Psi}/2 + \mathit{\Omega}/2 +$$
$$\alpha/2 + \beta/2 + \gamma/2 + \delta/2 + \epsilon/2 + \zeta/2 + \eta/2 + \theta/2 + \iota/2 + \kappa/2 + \lambda/2 + \mu/2 +$$
$$\nu/2 + \xi/2 + o/2 + \pi/2 + \rho/2 + \sigma/2 + \tau/2 + \upsilon/2 + \phi/2 + \chi/2 + \psi/2 + \omega/2 +$$
$$\varepsilon/2 + \vartheta/2 + \varpi/2 + \varrho/2 + \varsigma/2 + \varphi/2 +$$

3.4.10 (Big) Operators Sans Serif Bold

$\sum_{i=1}^{n} x^n$ $\prod_{i=1}^{n} x^n$ $\coprod_{i=1}^{n} x^n$ $\int_{i=1}^{n} x^n$ $\oint_{i=1}^{n} x^n$
$\bigotimes_{i=1}^{n} x^n$ $\bigoplus_{i=1}^{n} x^n$ $\bigodot_{i=1}^{n} x^n$ $\bigwedge_{i=1}^{n} x^n$ $\bigvee_{i=1}^{n} x^n$ $\biguplus_{i=1}^{n} x^n$ $\bigcup_{i=1}^{n} x^n$ $\bigcap_{i=1}^{n} x^n$ $\bigsqcup_{i=1}^{n} x^n$

$$\sum_{i=1}^{n} x^n \quad \prod_{i=1}^{n} x^n \quad \coprod_{i=1}^{n} x^n \quad \int_{i=1}^{n} x^n \quad \oint_{i=1}^{n} x^n$$

$$\bigotimes_{i=1}^{n} x^n \quad \bigoplus_{i=1}^{n} x^n \quad \bigodot_{i=1}^{n} x^n \quad \bigwedge_{i=1}^{n} x^n \quad \bigvee_{i=1}^{n} x^n \quad \biguplus_{i=1}^{n} x^n \quad \bigcup_{i=1}^{n} x^n \quad \bigcap_{i=1}^{n} x^n \quad \bigsqcup_{i=1}^{n} x^n$$

3.4.11 Radicals Sans Serif Bold

$$\sqrt{x+y} \quad \sqrt{x^2+y^2} \quad \sqrt{x_i^2+y_j^2} \quad \sqrt{\left(\frac{\cos x}{2}\right)} \quad \sqrt{\left(\frac{\sin x}{2}\right)}$$

$$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{x+y}}}}}}}$$

3.4.12 Over- and Underbraces Sans Serif Bold

$$\overbrace{x} \quad \overbrace{x+y} \quad \overbrace{x^2+y^2} \quad \overbrace{x_i^2+y_j^2} \quad \underbrace{x} \quad \underbrace{x+y} \quad \underbrace{x_i+y_j} \quad \underbrace{x_i^2+y_j^2}$$

3.4.13 Normal and Wide Accents Sans Serif Bold

$$\dot{x} \quad \ddot{x} \quad \vec{x} \quad \bar{x} \quad \overline{x} \quad \overline{xx} \quad \tilde{x} \quad \widetilde{x} \quad \widetilde{xx} \quad \widetilde{xxx} \quad \hat{x} \quad \widehat{x} \quad \widehat{xx} \quad \widehat{xxx}$$

$$\hat{x} \quad \check{x} \quad \tilde{x} \quad \acute{x} \quad \grave{x} \quad \dot{x} \quad \ddot{x} \quad \breve{x} \quad \bar{x} \quad \vec{x}$$

3.4.14 Long Arrows Sans Serif Bold

$$\longleftarrow\!\!\!\!-\!\!\!\longrightarrow \quad \leftrightarrow \quad \longleftarrow \quad \longrightarrow \quad \longleftrightarrow \quad \Longleftarrow\!\!\!=\!\!\!\Longrightarrow \quad \Leftrightarrow \quad \Longleftarrow \quad \Longrightarrow \quad \Longleftrightarrow$$

3.4.15 Left and Right Delimiters Sans Serif Bold

$$-(f)--[f]--\lfloor f\rfloor--\lceil f\rceil--\langle f\rangle--\{f\}-$$

Using `\left` and `\right`.

$$-\left(f\right)--\left[f\right]--\left\lfloor f\right\rfloor--\left\lceil f\right\rceil--\left\langle f\right\rangle--\left\{f\right\}-$$

$$-\left)f\right(--\left]f\right[--\left/f\right/--\left\backslash f\right\backslash--\left/f\right\backslash--\left\backslash f\right/-$$

3.4.16 Big-g-g Delimiters Sans Serif Bold

$$-\Bigg\lfloor\bigg\lfloor\Big\lfloor\big\lfloor\lfloor-\rfloor\big\rfloor\Big\rfloor\bigg\rfloor\Bigg\rfloor- \qquad -\Bigg(\bigg(\Big(\big((-)\big)\Big)\bigg)\Bigg)-$$

$$-\Bigg\lceil\bigg\lceil\Big\lceil\big\lceil\lceil-\rceil\big\rceil\Big\rceil\bigg\rceil\Bigg\rceil- \qquad -\Bigg\{\bigg\{\Big\{\big\{\{-\}\big\}\Big\}\bigg\}\Bigg\}-$$

$$-\Bigg[\bigg[\Big[\big[[-]\big]\Big]\bigg]\Bigg]- \qquad -\Bigg(\bigg(\Big(\big((-)\big)\Big)\bigg)\Bigg)-$$

$$-\Bigg\langle\bigg\langle\Big\langle\big\langle\langle-\rangle\big\rangle\Big\rangle\bigg\rangle\Bigg\rangle- \qquad -\Bigg\lgroup\bigg\lgroup\Big\lgroup\big\lgroup\lgroup-\rgroup\big\rgroup\Big\rgroup\bigg\rgroup\Bigg\rgroup-$$

$$-\Bigg\uparrow\bigg\uparrow\Big\uparrow\big\uparrow\uparrow-\downarrow\big\downarrow\Big\downarrow\bigg\downarrow\Bigg\downarrow- \qquad -\Bigg\Uparrow\bigg\Uparrow\Big\Uparrow\big\Uparrow\Uparrow-\Downarrow\big\Downarrow\Big\Downarrow\bigg\Downarrow\Bigg\Downarrow-$$

3.4.17 Binary Operators Sans Serif Bold

$x \pm y$	`\pm`	$x \cap y$	`\cap`	$x \diamond y$	`\diamond`	$x \oplus y$	`\oplus`
$x \mp y$	`\mp`	$x \cup y$	`\cup`	$x \bigtriangleup y$	`\bigtriangleup`	$x \ominus y$	`\ominus`
$x \times y$	`\times`	$x \uplus y$	`\uplus`	$x \bigtriangledown y$	`\bigtriangledown`	$x \otimes y$	`\otimes`
$x \div y$	`\div`	$x \sqcap y$	`\sqcap`	$x \triangleleft y$	`\triangleleft`	$x \oslash y$	`\oslash`
$x \ast y$	`\ast`	$x \sqcup y$	`\sqcup`	$x \triangleright y$	`\triangleright`	$x \odot y$	`\odot`
$x \star y$	`\star`	$x \vee y$	`\vee`	$x \lhd y$	`\lhd`	$x \bigcirc y$	`\bigcirc`
$x \circ y$	`\circ`	$x \wedge y$	`\wedge`	$x \rhd y$	`\rhd`	$x \dagger y$	`\dagger`
$x \bullet y$	`\bullet`	$x \setminus y$	`\setminus`	$x \unlhd y$	`\unlhd`	$x \ddagger y$	`\ddagger`
$x \cdot y$	`\cdot`	$x \wr y$	`\wr`	$x \unrhd y$	`\unrhd`	$x\S y$	`\S`
$x + y$	`+`	$x - y$	`-`	$x \amalg y$	`\amalg`	$x\P y$	`\P`

3.4.18 Relations Sans Serif Bold

$x \leq y$	`\leq`	$x \geq y$	`\geq`	$x \equiv y$	`\equiv`	$x \models y$	`\models`
$x \prec y$	`\prec`	$x \succ y$	`\succ`	$x \sim y$	`\sim`	$x \perp y$	`\perp`
$x \preceq y$	`\preceq`	$x \succeq y$	`\succeq`	$x \simeq y$	`\simeq`	$x \mid y$	`\mid`
$x \ll y$	`\ll`	$x \gg y$	`\gg`	$x \asymp y$	`\asymp`	$x \parallel y$	`\parallel`
$x \subset y$	`\subset`	$x \supset y$	`\supset`	$x \approx y$	`\approx`	$x \bowtie y$	`\bowtie`
$x \subseteq y$	`\subseteq`	$x \supseteq y$	`\supseteq`	$x \cong y$	`\cong`	$x \Join y$	`\Join`
$x \sqsubset y$	`\sqsubset`	$x \sqsupset y$	`\sqsupset`	$x \neq y$	`\neq`	$x \smile y$	`\smile`
$x \sqsubseteq y$	`\sqsubseteq`	$x \sqsupseteq y$	`\sqsupseteq`	$x \doteq y$	`\doteq`	$x \frown y$	`\frown`
$x \in y$	`\in`	$x \ni y$	`\ni`	$x \propto y$	`\propto`	$x = y$	`=`
$x \vdash y$	`\vdash`	$x \dashv y$	`\dashv`	$x < y$	`<`	$x > y$	`>`
$x : y$	`:`						

3.4.19 Punctuation Sans Serif Bold

x,y	`,`	$x;y$	`;`	$x \colon y$	`\colon`	$x \ldotp y$	`\ldotp`	$x \cdotp y$	`\cdotp`

3.4.20 Arrows Sans Serif Bold

$x \leftarrow y$	`\leftarrow`	$x \longleftarrow y$	`\longleftarrow`	$x \uparrow y$	`\uparrow`
$x \Leftarrow y$	`\Leftarrow`	$x \Longleftarrow y$	`\Longleftarrow`	$x \Uparrow y$	`\Uparrow`
$x \rightarrow y$	`\rightarrow`	$x \longrightarrow y$	`\longrightarrow`	$x \downarrow y$	`\downarrow`
$x \Rightarrow y$	`\Rightarrow`	$x \Longrightarrow y$	`\Longrightarrow`	$x \Downarrow y$	`\Downarrow`
$x \leftrightarrow y$	`\leftrightarrow`	$x \longleftrightarrow y$	`\longleftrightarrow`	$x \updownarrow y$	`\updownarrow`
$x \Leftrightarrow y$	`\Leftrightarrow`	$x \Longleftrightarrow y$	`\Longleftrightarrow`	$x \Updownarrow y$	`\Updownarrow`
$x \mapsto y$	`\mapsto`	$x \longmapsto y$	`\longmapsto`	$x \nearrow y$	`\nearrow`
$x \hookleftarrow y$	`\hookleftarrow`	$x \hookrightarrow y$	`\hookrightarrow`	$x \searrow y$	`\searrow`
$x \leftharpoonup y$	`\leftharpoonup`	$x \rightharpoonup y$	`\rightharpoonup`	$x \swarrow y$	`\swarrow`
$x \leftharpoondown y$	`\leftharpoondown`	$x \rightharpoondown y$	`\rightharpoondown`	$x \nwarrow y$	`\nwarrow`
$x \rightleftharpoons y$	`\rightleftharpoons`	$x \leadsto y$	`\leadsto`		

3.4.21 Miscellaneous Symbols Sans Serif Bold

$x\ldots y$	\ldots	$x\cdots y$	\cdots	$x\vdots y$	\vdots	$x\ddots y$	\ddots
$x\aleph y$	\aleph	$x\prime y$	\prime	$x\forall y$	\forall	$x\infty y$	\infty
$x\hbar y$	\hbar	$x\emptyset y$	\emptyset	$x\exists y$	\exists	$x\Box y$	\Box
$x\imath y$	\imath	$x\nabla y$	\nabla	$x\neg y$	\neg	$x\Diamond y$	\Diamond
$x\jmath y$	\jmath	$x\surd y$	\surd	$x\flat y$	\flat	$x\triangle y$	\triangle
$x\ell y$	\ell	$x\top y$	\top	$x\natural y$	\natural	$x\clubsuit y$	\clubsuit
$x\wp y$	\wp	$x\bot y$	\bot	$x\sharp y$	\sharp	$x\diamondsuit y$	\diamondsuit
$x\Re y$	\Re	$x\\| y$	\\|	$x\backslash y$	\backslash	$x\heartsuit y$	\heartsuit
$x\Im y$	\Im	$x\angle y$	\angle	$x\partial y$	\partial	$x\spadesuit y$	\spadesuit
$x\mho y$	\mho	$x.y$	.	$x\vert y$	|	$x!y$	!

3.4.22 Variable-Sized Operators Sans Serif Bold

$x\sum y$	\sum	$x\bigcap y$	\bigcap	$x\bigodot y$	\bigodot
$x\prod y$	\prod	$x\bigcup y$	\bigcup	$x\bigotimes y$	\bigotimes
$x\coprod y$	\coprod	$x\bigsqcup y$	\bigsqcup	$x\bigoplus y$	\bigoplus
$x\int y$	\int	$x\bigvee y$	\bigvee	$x\biguplus y$	\biguplus
$x\oint y$	\oint	$x\bigwedge y$	\bigwedge		

3.4.23 Log-Like Operators Sans Serif Bold

$x\arccos y$	$x\cos y$	$x\csc y$	$x\exp y$	$x\ker y$	$x\limsup y$	$x\min y$	$x\sinh y$
$x\arcsin y$	$x\cosh y$	$x\deg y$	$x\gcd y$	$x\lg y$	$x\ln y$	$x\Pr y$	$x\sup y$
$x\arctan y$	$x\cot y$	$x\det y$	$x\hom y$	$x\lim y$	$x\log y$	$x\sec y$	$x\tan y$
$x\arg y$	$x\coth y$	$x\dim y$	$x\inf y$	$x\liminf y$	$x\max y$	$x\sin y$	$x\tanh y$

3.4.24 Delimiters Sans Serif Bold

$x(y$	(	$x)y$	)	$x\uparrow y$	\uparrow	$x\Uparrow y$	\Uparrow
$x[y$	[	$x]y$	]	$x\downarrow y$	\downarrow	$x\Downarrow y$	\Downarrow
$x\{y$	\{	$x\}y$	\}	$x\updownarrow y$	\updownarrow	$x\Updownarrow y$	\Updownarrow
$x\lfloor y$	\lfloor	$x\rfloor y$	\rfloor	$x\lceil y$	\lceil	$x\rceil y$	\rceil
$x\langle y$	\langle	$x\rangle y$	\rangle	x/y	/	$x\backslash y$	\backslash
$x\vert y$	|	$x\\| y$	\\|				

3.4.25 Large Delimiters Sans Serif Bold

$\rmoustache$	\rmoustache	$\lmoustache$	\lmoustache	$\rgroup$	\rgroup	$\lgroup$	\lgroup
$\arrowvert$	\arrowvert	$\Arrowvert$	\Arrowvert	$\bracevert$	\bracevert		

3.4.26 Math Mode Accents Sans Serif Bold

$\hat{a}$	\hat{a}	$\acute{a}$	\acute{a}	$\bar{a}$	\bar{a}	$\dot{a}$	\dot{a}	$\breve{a}$	\breve{a}
$\check{a}$	\check{a}	$\grave{a}$	\grave{a}	$\vec{a}$	\vec{a}	$\ddot{a}$	\ddot{a}	$\tilde{a}$	\tilde{a}

3.4.27 Miscellaneous Constructions Sans Serif Bold

$\widetilde{abc}$	\widetilde{abc}	$\widehat{abc}$	\widehat{abc}
$\overleftarrow{abc}$	\overleftarrow{abc}	$\overrightarrow{abc}$	\overrightarrow{abc}
$\overline{abc}$	\overline{abc}	$\underline{abc}$	\underline{abc}
$\overbrace{abc}$	\overbrace{abc}	$\underbrace{abc}$	\underbrace{abc}
$\sqrt{abc}$	\sqrt{abc}	$\sqrt[n]{abc}$	\sqrt[n]{abc}
f'	f'	$\frac{abc}{xyz}$	\frac{abc}{xyz}

3.4.28 AMS Delimiters Sans Serif Bold

$x\ulcorner y$	\ulcorner	$x\urcorner y$	\urcorner	$x\llcorner y$	\llcorner	$x\lrcorner y$	\lrcorner

3.4.29 AMS Arrows Sans Serif Bold

$x \dashrightarrow y$	\dashrightarrow	$x \dashleftarrow y$	\dashleftarrow
$x \leftleftarrows y$	\leftleftarrows	$x \leftrightarrows y$	\leftrightarrows
$x \Lleftarrow y$	\Lleftarrow	$x \twoheadleftarrow y$	\twoheadleftarrow
$x \leftarrowtail y$	\leftarrowtail	$x \looparrowleft y$	\looparrowleft
$x \leftrightharpoons y$	\leftrightharpoons	$x \curvearrowleft y$	\curvearrowleft
$x \circlearrowleft y$	\circlearrowleft	$x \Lsh y$	\Lsh
$x \upuparrows y$	\upuparrows	$x \upharpoonleft y$	\upharpoonleft
$x \downharpoonleft y$	\downharpoonleft	$x \multimap y$	\multimap
$x \leftrightsquigarrow y$	\leftrightsquigarrow	$x \rightrightarrows y$	\rightrightarrows
$x \rightleftarrows y$	\rightleftarrows	$x \rightrightarrows y$	\rightrightarrows
$x \rightleftarrows y$	\rightleftarrows	$x \twoheadrightarrow y$	\twoheadrightarrow
$x \rightarrowtail y$	\rightarrowtail	$x \looparrowright y$	\looparrowright
$x \rightleftharpoons y$	\rightleftharpoons	$x \curvearrowright y$	\curvearrowright
$x \circlearrowright y$	\circlearrowright	$x \Rsh y$	\Rsh
$x \downdownarrows y$	\downdownarrows	$x \upharpoonright y$	\upharpoonright
$x \downharpoonright y$	\downharpoonright	$x \rightsquigarrow y$	\rightsquigarrow

3.4.30 AMS Negated Arrows Sans Serif Bold

$x \nleftarrow y$	\nleftarrow	$x \nrightarrow y$	\nrightarrow
$x \nLeftarrow y$	\nLeftarrow	$x \nRightarrow y$	\nRightarrow
$x \nleftrightarrow y$	\nleftrightarrow	$x \nLeftrightarrow y$	\nLeftrightarrow

3.4.31 AMS Greek Sans Serif Bold

$x\digamma y$ `\digamma` $x\varkappa y$ `\varkappa`

3.4.32 AMS Hebrew Sans Serif Bold

$x\beth y$ `\beth` $x\daleth y$ `\daleth` $x\gimel y$ `\gimel`

3.4.33 AMS Miscellaneous Sans Serif Bold

$x\hbar y$	`\hbar`	$x\hslash y$	`\hslash`
$x \vartriangle y$	`\vartriangle`	$x\triangledown y$	`\triangledown`
$x\square y$	`\square`	$x\lozenge y$	`\lozenge`
$x\circledS y$	`\circledS`	$x\angle y$	`\angle`
$x\measuredangle y$	`\measuredangle`	$x\nexists y$	`\nexists`
$x\mho y$	`\mho`	$x\Finv y$	`\Finv`[u]
$x\Game y$	`\Game`[u]	$x\Bbbk y$	`\Bbbk`[u]
$x\backprime y$	`\backprime`	$x\varnothing y$	`\varnothing`
$x\blacktriangle y$	`\blacktriangle`	$x\blacktriangledown y$	`\blacktriangledown`
$x\blacksquare y$	`\blacksquare`	$x\blacklozenge y$	`\blacklozenge`
$x\bigstar y$	`\bigstar`	$x\sphericalangle y$	`\sphericalangle`
$x\complement y$	`\complement`	$x\eth y$	`\eth`
$x\diagup y$	`\diagup`[u]	$x\diagdown y$	`\diagdown`[u]

[u] **Not defined in** `amssymb.sty`**, define using the** `\newsymbol` **command.**

3.4.34 AMS Binary Operators Sans Serif Bold

$x \dotplus y$	`\dotplus`	$x \smallsetminus y$	`\smallsetminus`
$x \Cap y$	`\Cap`	$x \Cup y$	`\Cup`
$x \barwedge y$	`\barwedge`	$x \veebar y$	`\veebar`
$x \doublebarwedge y$	`\doublebarwedge`	$x \boxminus y$	`\boxminus`
$x \boxtimes y$	`\boxtimes`	$x \boxdot y$	`\boxdot`
$x \boxplus y$	`\boxplus`	$x \divideontimes y$	`\divideontimes`
$x \ltimes y$	`\ltimes`	$x \rtimes y$	`\rtimes`
$x \leftthreetimes y$	`\leftthreetimes`	$x \rightthreetimes y$	`\rightthreetimes`
$x \curlywedge y$	`\curlywedge`	$x \curlyvee y$	`\curlyvee`
$x \circleddash y$	`\circleddash`	$x \circledast y$	`\circledast`
$x \circledcirc y$	`\circledcirc`	$x \centerdot y$	`\centerdot`
$x \intercal y$	`\intercal`		

3.4.35 AMS Relations Sans Serif Bold

$x \leqslant y$ \leqslant
$x \lesssim y$ \lesssim
$x \approxeq y$ \approxeq
$x \lll y$ \lll
$x \lesseqgtr y$ \lesseqgtr
$x \doteqdot y$ \doteqdot
$x \fallingdotseq y$ \fallingdotseq
$x \backsimeq y$ \backsimeq
$x \Subset y$ \Subset
$x \preccurlyeq y$ \preccurlyeq
$x \precsim y$ \precsim
$x \vartriangleleft y$ \vartriangleleft
$x \vDash y$ \vDash
$x \smallsmile y$ \smallsmile
$x \bumpeq y$ \bumpeq
$x \geqq y$ \geqq
$x \eqslantgtr y$ \eqslantgtr
$x \gtrapprox y$ \gtrapprox
$x \ggg y$ \ggg
$x \gtreqless y$ \gtreqless
$x \eqcirc y$ \eqcirc
$x \triangleq y$ \triangleq
$x \thickapprox y$ \thickapprox
$x \Supset y$ \Supset
$x \succcurlyeq y$ \succcurlyeq
$x \succsim y$ \succsim
$x \vartriangleright y$ \vartriangleright
$x \Vdash y$ \Vdash
$x \shortparallel y$ \shortparallel
$x \pitchfork y$ \pitchfork
$x \blacktriangleleft y$ \blacktriangleleft
$x \backepsilon y$ \backepsilon
$x \because y$ \because

3.4.36 AMS Negated Relations Sans Serif Bold

$x \nless y$	\nless	$x \nleq y$	\nleq
$x \nleqslant y$	\nleqslant	$x \nleqq y$	\nleqq
$x \lneq y$	\lneq	$x \lneqq y$	\lneqq
$x \lvertneqq y$	\lvertneqq	$x \lnsim y$	\lnsim
$x \lnapprox y$	\lnapprox	$x \nprec y$	\nprec
$x \npreceq y$	\npreceq	$x \precnsim y$	\precnsim
$x \precnapprox y$	\precnapprox	$x \nsim y$	\nsim
$x \nshortmid y$	\nshortmid	$x \nmid y$	\nmid
$x \nvdash y$	\nvdash	$x \nvDash y$	\nvDash
$x \ntriangleleft y$	\ntriangleleft	$x \ntrianglelefteq y$	\ntrianglelefteq
$x \nsubseteq y$	\nsubseteq	$x \subsetneq y$	\subsetneq
$x \varsubsetneq y$	\varsubsetneq	$x \subsetneqq y$	\subsetneqq
$x \varsubsetneqq y$	\varsubsetneqq	$x \ngtr y$	\ngtr
$x \ngeq y$	\ngeq	$x \ngeqslant y$	\ngeqslant
$x \ngeqq y$	\ngeqq	$x \gneq y$	\gneq
$x \gneqq y$	\gneqq	$x \gvertneqq y$	\gvertneqq
$x \gnsim y$	\gnsim	$x \gnapprox y$	\gnapprox
$x \nsucc y$	\nsucc	$x \nsucceq y$	\nsucceq
$x \nsucceqq y$	\nsucceqq	$x \succnsim y$	\succnsim
$x \succnapprox y$	\succnapprox	$x \ncong y$	\ncong
$x \nshortparallel y$	\nshortparallel	$x \nparallel y$	\nparallel
$x \nvDash y$	\nvDash	$x \nVDash y$	\nVDash
$x \ntriangleright y$	\ntriangleright	$x \ntrianglerighteq y$	\ntrianglerighteq
$x \nsupseteq y$	\nsupseteq	$x \nsupseteqq y$	\nsupseteqq
$x \supsetneq y$	\supsetneq	$x \varsupsetneq y$	\varsupsetneq
$x \supsetneqq y$	\supsetneqq	$x \varsupsetneqq y$	\varsupsetneqq

3.4.37 Math "Torture" Test Sans Serif Bold

Most of the following examples are taken from *The TEXbook* (Knuth, 1984, see https://ctan.org/pkg/texbook) and were adapted for LaTeX from Karl Berry's torture test for plain TEX math fonts.

$x + y - z,\quad x + y * z,\quad z * y / z,\quad (x + y)(x - y) = x^2 - y^2,$

$x \times y \cdot z = [x\, y\, z],\quad x \circ y \bullet z,\quad x \cup y \cap z,\quad x \sqcup y \sqcap z,$

$x \vee y \wedge z,\quad x \pm y \mp z,\quad x = y / z,\quad x := y,\quad x \le y \ne z,\quad x \sim y \simeq z\, x \equiv y \not\equiv z,\quad x \subset y \subseteq z$

$\sin 2\theta = 2 \sin\theta \cos\theta,\quad O(n \log n \log n),\quad \Pr(X > x) = \exp(-x/\mu),$

$\bigl(x \in A(n) \bigm| x \in B(n)\bigr),\quad \bigcup_n X_n \bigm\| \bigcap_n Y_n$

In-text matrices $\left(\begin{smallmatrix} 1 & 1 \\ 0 & 1 \end{smallmatrix}\right)$ and $\left(\begin{smallmatrix} a & b & c \\ 1 & m & n \end{smallmatrix}\right)$.

$$a_0 + \cfrac{1}{a_1 + \cfrac{1}{a_2 + \cfrac{1}{a_3 + \cfrac{1}{a_4}}}}$$

$$\binom{p}{2} x^2 y^{p-2} - \frac{1}{1-x} \frac{1}{1-x^2} = \frac{a+1}{b} \bigg/ \frac{c+1}{d}.$$

$$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}}$$

$$\sqrt[n]{1+\sqrt[k]{1+\sqrt[5]{1+\sqrt[4]{1+\sqrt[3]{1+x}}}}}$$

$$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2}\right) \left|\phi(x+\mathrm{i}y)\right|^2 = 0$$

$$\pi(n) = \sum_{m=2}^{n} \left\lfloor \left(\sum_{k=1}^{m-1} \lfloor (m/k) / \lceil m/k \rceil \rfloor \right)^{-1} \right\rfloor .$$

$$\int_0^\infty \frac{t - \mathrm{i}b}{t^2 + b^2} e^{\mathrm{i}at} \, \mathrm{d}t = e^{ab} E_1(ab), \quad a, b > 0.$$

$$A := \begin{pmatrix} x-\lambda & 1 & 0 \\ 0 & x-\lambda & 1 \\ 0 & 0 & x-\lambda \end{pmatrix}.$$

$$\begin{pmatrix} a & b & c \\ d & e & f \end{pmatrix} \begin{pmatrix} u & x \\ v & y \\ w & z \end{pmatrix}$$

$$A = \begin{pmatrix} a_{11} & a_{12} & \ldots & a_{1n} \\ a_{21} & a_{22} & \ldots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \ldots & a_{mn} \end{pmatrix}$$

$$M = \begin{array}{c} \\ C \\ I \\ C' \end{array} \begin{array}{c} \begin{array}{ccc} C & I & C' \end{array} \\ \begin{pmatrix} 1 & 0 & 0 \\ b & 1-b & 0 \\ 0 & a & 1-a \end{pmatrix} \end{array}$$

$$\sum_{n=0}^{\infty} a_n z^n \quad \text{converges if} \quad |z| < \left(\limsup_{n\to\infty} \sqrt[n]{|a_n|} \right)^{-1}.$$

$$\frac{f(x+\Delta x)-f(x)}{\Delta x} \to f'(x) \qquad \text{as } \Delta x \to 0.$$

$$\|u_i\| = 1, \qquad u_i \cdot u_j = 0 \quad \text{if } i \neq j.$$

$$\text{The confluent image of } \left\{ \begin{array}{c} \text{an arc} \\ \text{a circle} \\ \text{a fan} \end{array} \right\} \text{ is } \left\{ \begin{array}{c} \text{an arc} \\ \text{an arc or a circle} \\ \text{a fan or an arc} \end{array} \right\}.$$

$$\begin{aligned} T(n) \le T(2^{\lceil \lg n \rceil}) &\le c(3^{\lceil \lg n \rceil} - 2^{\lceil \lg n \rceil}) \\ &< 3c \cdot 3^{\lg n} \\ &= 3c\, n^{\lg 3}. \end{aligned}$$

$$\begin{aligned} (x+y)(x-y) &= x^2 - xy + yx - y^2 \\ &= x^2 - y^2 \\ (x+y)^2 &= x^2 + 2xy + y^2. \end{aligned}$$

$$\begin{aligned} \left(\int_{-\infty}^{\infty} e^{-x^2}\, dx \right)^2 &= \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)}\, dx\, dy \\ &= \int_0^{2\pi} \int_0^{\infty} e^{-r^2}\, dr\, d\theta \\ &= \int_0^{2\pi} \left(e^{-\frac{r^2}{2}} \Big|_{r=0}^{r=\infty} \right) d\theta \\ &= \pi. \end{aligned}$$

$$\prod_{k\ge 0} \frac{1}{(1-q^k z)} = \sum_{n\ge 0} z^n \Bigg/ \prod_{1\le k\le n} (1-q^k).$$

$$\sum_{\substack{0<i\le m \\ 0<j\le n}} p(i,j) \neq \sum_{i=1}^{p} \sum_{j=1}^{q} \sum_{k=1}^{r} a_{ij} b_{jk} c_{ki} \neq \sum_{\substack{1\le i\le p \\ 1\le j\le q \\ 1\le k\le r}} a_{ij} b_{jk} c_{ki}$$

$$\max_{1\le n\le m} \log_2 P_n \quad \text{and} \quad \lim_{x\to 0} \frac{\sin x}{x} = 1$$

Inline math: $\max_{1\le n\le m} \log_2 P_n$ and $\lim_{x\to 0} \frac{\sin x}{x} = 1$

$$p_1(n) = \lim_{m\to\infty} \sum_{\nu=0}^{\infty} \bigl(1 - \cos^{2m}(\nu!^n \pi/n)\bigr)$$

Inline math: $p_1(n) = \lim_{m\to\infty} \sum_{\nu=0}^{\infty} \bigl(1 - \cos^{2m}(\nu!^n \pi/n)\bigr)$

Lebenslauf

Geboren am 24. Januar 1995 in Summacumlaudeville, wuchs ich in Neustadt (Nordrhein-Westfalen) sowie in Newcastle (Nova Landia, Neufundland) auf. Im Jahr 2013 erlangte ich am Gymnasium Neustadt die allgemeine Hochschulreife. Im Wintersemester 2013/2014 habe ich zunächst das Studium der Kunstgeschichte an der Rheinischen Friedrich-Wilhelms-Universität Bonn begonnen. Im Sommersemester 2014 nahm ich dann das Studium der Volkswirtschaftslehre auf, das ich im August 2018 mit dem Abschluss Master of Science (M. Sc.) beendete (Gesamtnote: 1,3). Meine Masterarbeit „The Influence of Stress on the Performance of BGSE Graduate Students“ wurde von Prof. Dr. Lorem Ipsum betreut. Während des Masterstudiums besuchte ich im Herbst 2016 die Universität Tel Aviv in Israel als Austauschstudent. Im Oktober 2018 habe ich das Promotionsstudium an der Bonn Graduate School of Economics aufgenommen.