Cheatsheet for the *macros.sty* file

July 6, 2020

1 Operations

- \vect{x} – vec (x)
- \Diag{x} – Diag $\{x\}$
- \diag{x} – diag $\{x\}$
- \rank{x} – rank (x)
- \spark{x} – spark (x)
- \card{x} – card (x)
- \trace{x} – Tr $\{x\}$
- \supp{x} – supp (x)
- \expval{x} – E $\{x\}$
- \cov{x} – Cov $\{x\}$
- \prob{x} – Pr $\{x\}$
- \var{x} – Var $\{x\}$
- \'lpf{x} – LPF $\{x\}$

2 Most Common Sets

- \Rset – $\mathbb{R}$
- \Cset – $\mathbb{C}$
- \Nset – $\mathbb{N}$
- \Zset – $\mathbb{Z}$
- \Qset – $\mathbb{Q}$
- \Dset – $\mathbb{D}$

3 Trigonometry

- \cos(x)– $\cos(x)$
- \cosh – cosh
- \sen – sen
- \senh – senh
- \tg – tg
- \tgh – tgh
- \ctg – ctg
- \ctgh – ctgh

4 mathrm

'Normal' text in math envinroment.

- \arm – a
- \zrm – z
- \Arm – A
- \Zrm – Z

5 mathcal

Calligraphic font.

- \Arm – $\mathcal{A}$
- \Zrm – $\mathcal{Z}$

6 mathsf

Sans serif.

- \arm – a
- \zrm – z
- \Arm – A
- \Zrm – Z

7 mathbf

Bold face.

- \abf – $\mathbf{a}$
- \zbf – $\mathbf{z}$
- \Abf – $\mathbf{A}$
- \Zbf – $\mathbf{Z}$

8 boldsymbol

Bold symbol.

- \abs – $\boldsymbol{a}$
- \zbs – $\boldsymbol{z}$
- \Abs – $\boldsymbol{A}$
- \Zbs – $\boldsymbol{Z}$

9 Tilde

Tilde

- \atil – $\tilde{a}$
- \ztil – $\tilde{z}$
- \Atil – $\tilde{A}$
- \Ztil – $\tilde{Z}$

10 tilde + mathbf

Tilde + Bold face.

- \abftil – $\tilde{\mathbf{a}}$
- \zbftil – $\tilde{\mathbf{z}}$
- \Abftil – $\tilde{\mathbf{A}}$
- \Zbftil – $\tilde{\mathbf{Z}}$

11 tilde + mathbf

Tilde + mathbf.

- \abft – $\tilde{\mathbf{a}}$
- \zbft – $\tilde{\mathbf{z}}$
- \Abft – $\tilde{\mathbf{A}}$
- \Zbft – $\tilde{\mathbf{Z}}$

12 Hat

Hat.

- \ahat – $\hat{a}$
- \zhat – $\hat{z}$
- \Ahat – $\hat{A}$
- \Zhat – $\hat{Z}$

13 Hat + mathbf

Hat + bold face.

- \abfh – $\hat{\mathbf{a}}$
- \zbfh – $\hat{\mathbf{z}}$
- \Abfh – $\hat{\mathbf{A}}$
- \Zbfh – $\hat{\mathbf{Z}}$

14 hat + boldsymbol

Hat + Bold symbol.

- \absh – $\hat{\boldsymbol{a}}$
- \zbsh – $\hat{\boldsymbol{z}}$
- \Absh – $\hat{\boldsymbol{A}}$
- \Zbsh – $\hat{\boldsymbol{Z}}$

15 Ring

Ring.

- \aring – $\mathring{a}$
- \zring – $\mathring{z}$
- \Aring – $\mathring{A}$
- \Zring – $\mathring{Z}$

16 Ring + mathbf

Ring + bold face.

- \aringbf – $\mathring{\mathbf{a}}$
- \zringbf – $\mathring{\mathbf{z}}$
- \Aringbf – $\mathring{\mathbf{A}}$
- \Zringbf – $\mathring{\mathbf{Z}}$

17 Greek letter + bold symbols

- \Phibf – $\boldsymbol{\Phi}$
- \Lambdabf – $\boldsymbol{\Lambda}$
- \Deltabf – $\boldsymbol{\Delta}$
- \alphabf – $\boldsymbol{\alpha}$
- \betabf – $\boldsymbol{\beta}$
- \gammabf – $\boldsymbol{\gamma}$
- \deltabf – $\boldsymbol{\delta}$
- \epsilonbf – $\boldsymbol{\epsilon}$
- \etabf – $\boldsymbol{\eta}$
- \thetabf – $\boldsymbol{\theta}$
- \varthetabf – $\boldsymbol{\vartheta}$
- \iotabf – $\boldsymbol{\iota}$
- \kappabf – $\boldsymbol{\kappa}$

- \lambdabf – $\boldsymbol{\lambda}$
- \mubf – $\boldsymbol{\mu}$
- \nubf – $\boldsymbol{\nu}$
- \xibf – $\boldsymbol{\xi}$
- \oobf – $\boldsymbol{\o}$
- \pibf – $\boldsymbol{\pi}$
- \varpibf – $\boldsymbol{\varpi}$
- \taubf – $\boldsymbol{\tau}$
- \upsilonbf – $\boldsymbol{\upsilon}$
- \phibf – $\boldsymbol{\phi}$
- \chibf – $\boldsymbol{\chi}$
- \psibf – $\boldsymbol{\psi}$
- \omegabf – $\boldsymbol{\omega}$
- \Pibf – $\boldsymbol{\Pi}$
- \Sigmabf – $\boldsymbol{\Sigma}$