

Scalar serif font, non-bold

$a, \alpha, \gamma, x, \xi, y, z$

Vector serif, bold

$\boldsymbol{a} = a_i, \boldsymbol{\alpha}, \boldsymbol{\gamma}, \boldsymbol{x}, \boldsymbol{\xi}, \boldsymbol{y}, \boldsymbol{z}, \dots$

Matrix serif font, bold, (uppercase)

$\boldsymbol{a} = a_{ij}, \boldsymbol{A} = A_{ij}, \boldsymbol{\gamma}, \boldsymbol{\Gamma}, \boldsymbol{x}, \boldsymbol{X}, \boldsymbol{\xi}, \boldsymbol{\Xi}, \boldsymbol{y}, \boldsymbol{Y}, \boldsymbol{z}, \boldsymbol{Z}, \dots$

Tensor sans-serif font, bold, uppercase

$\boldsymbol{A} = A_{ijk}, \boldsymbol{X}, \boldsymbol{Y}, \boldsymbol{Z}, \dots$

Random variable/vector serif font, non-bold, uppercase

$A = A_i, X, Y, Z, \dots$

Sets using mathbb command

$\mathbb{C}, \mathbb{R}, \mathbb{N}, \mathbb{Z}, \dots$