

## Lucida Bright OT fonts

The unicode-math package now has these option settings: `[bold-style=ISO,math-style=ISO]`. The “bold-style” option causes bold math symbols to be typeset in italic typeface.

One problem remains: Using boldface in math mode.

The problem: Given the original in plain math.

*Source:*  `$\$B_3\big(s,a,(a+4)/3\big)\$$`

*Typeset:*  $B_3(s, a, (a + 4)/3)$

I want  $B_3$  to be in boldface in math mode with both  $B$  and its subscript 3 in boldface but with an upright subscript.

- (1) Use the command `\boldmath{}`.  
*Source:*  `$\$\boldmath{B_3}\big(s,a,(a+4)/3\big)\$$`   
*Typeset:*  $\mathbf{B}_3(s, a, (a + 4)/3)$ .  
*Comment:* B is bold but upright. The subscript 3 is bold and upright.
- (2) Use the command `\mathbf{}`.  
*Source:*  `$\$\mathbf{B_3}\big(s,a,(a+4)/3\big)\$$`   
*Typeset:*  $\mathbf{B}_3(s, a, (a + 4)/3)$   
*Comment:* `\mathbf{}` changes  $B_{\{3\}}$  to boldface but B is upright and 3 is not bold.  
Same as `\boldmath`
- (3) Use unicode-symbol commands `\mbfitB` for B and `\mbfthree` for 3.  
*Source:*  `$\$\mbfitB_{\mbfthree}\big(s,a,(a+4)/3\big)\$$`   
*Typeset:*  $\mathbf{B}_3(s, a, (a + 4)/3)$   
*Comment:* Typeset output has bold B and 3, B is italic and 3 is upright.  
*This is the desired outcome.*
- (4) Use only the unicode-symbol command `\mbfitB`  
*Source:*  `$\$\mbfitB_{\{3}\}\big(s,a,(a+4)/3\big)\$$`   
*Typeset:*  $\mathbf{B}_3(s, a, (a + 4)/3)$   
*Comment:* B is bold and italic and 3 is upright but not bold.
- (5) Use unicode command `\symbf` only for B  
*Source:*  `$\$\symbf{B}_{\{3}\}\big(s,a,(a+4)/3\big)\$$`   
*Typeset:*  $\mathbf{B}_3(s, a, (a + 4)/3)$   
*Comment:* B is bold and italic and 3 is upright but not bold.  
Same as the immediately preceding item.

- (6) Use unicode command `\symbf` for both B and 3  
*Source:*  `$\symbf{B_3}\big(s, a, (a+4)/3\big)$`  
*Typeset:*  $\mathbf{B}_3(s, a, (a + 4)/3)$   
*Comment:* B is bold and italic, and 3 is bold and upright.  
*This is the desired outcome.*  
 It is also the preferred approach because it is simpler and more general than using the command pair `\mbfitB` and `\mbfthree`.
- (7) Use the command `\bm{}` from the “bm” package.  
*Source:*  `$\bm{B_3}\big(s, a, (a+4)/3\big)$`  
*Typeset:*  $\mathbf{\Gamma}_3(s, a, (a + 4)/3)$ .  
*Comment:* The typeset output is incorrect.  
 Package bm does not work.