

# The latex-lab-mathpkg code\*

L<sup>A</sup>T<sub>E</sub>X Project

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Abstract

## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>The Implementation</b>	<b>1</b>
2.1	File declaration . . . . .	1
2.2	breqn . . . . .	1
2.3	cases . . . . .	2
2.4	bm . . . . .	2
2.5	Wrapper files for testphase key . . . . .	2
	<b>Index</b>	<b>2</b>

## 1 Introduction

This file implements adaption to various math packages needed for the tagging project.

## 2 The Implementation

1 `<@=math>`

2 `<*kernel>`

### 2.1 File declaration

3 `\ProvidesFile{latex-lab-mathpkg.ltx}`

4 `[2023-01-05 v0.1a mathpkg adaption]`

### 2.2 breqn

5 `\AddToHook{package/breqn/after}{`

6 `\RegisterMathEnvironment{dmath}`

7 `\RegisterMathEnvironment{dgroup*}`

---

\*

```

8   \AddToHook{env/dmath/begin}{\tagpdfparaOff}
9   \AddToHook{env/dgroup*/begin}{\tagpdfparaOff}
10 }

```

## 2.3 cases

Force loading of amsmath before cases.

```

11 \AddToHook {package/cases/before}{\RequirePackage{amsmath}}
12 \AddToHook{package/cases/after}{
13   \RegisterMathEnvironment{subnumcases}
14 }

```

## 2.4 bm

Similar to the amsbsy code in latex-lab-amsmath for `\pmb` we need to mark up copies as artifact:

```

15 \ExplSyntaxOn
16 \AddToHook{package/bm/after}
17 {
18   \def\bm@pmb@@#1#2#3{%
19     \hbox_set:Nn\l__math_tmpa_box{${m@th#1#3$}%
20     \dimen@#2\wd\tw@
21     \rlap{\box_use:N\l__math_tmpa_box}%
22     \tag_mc_end:\tag_mc_begin:n{artifact}
23     \tag_mc_reset_box:N\l__math_tmpa_box
24     \kern\dimen@
25     \raise1.5\dimen@\rlap{\box_use:N\l__math_tmpa_box}%
26     \kern\dimen@
27     \box_use_drop:N\l__math_tmpa_box
28     \tag_mc_end:\tag_mc_begin:n{}}%
29   }}
30 }
31 \ExplSyntaxOff
32 </kernel>

```

## 2.5 Wrapper files for testphase key

# Index

The *italic* numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

A		P	
<code>\AddToHook</code>	5, 8, 9, 11, 12, 16	<code>\pmb</code>	<u>2</u>
		<code>\ProvidesFile</code>	3
B		R	
box commands:		<code>\raise</code>	25
<code>\box_use:N</code>	21, 25	<code>\RegisterMathEnvironment</code>	6, 7, 13
<code>\box_use_drop:N</code>	27	<code>\RequirePackage</code>	11
box internal commands:		<code>\rlap</code>	21, 25
<code>\l_math_tmpa_box</code>	19, 21, 23, 25, 27		
D		T	
<code>\def</code>	18	tag commands:	
		<code>\tag_mc_begin:n</code>	22, 28
		<code>\tag_mc_end:</code>	22, 28
		<code>\tag_mc_reset_box:N</code>	23
E		<code>\tagpdfparaOff</code>	8, 9
<code>\ExplSyntaxOff</code>	31	T <sub>E</sub> X and L <sup>A</sup> T <sub>E</sub> X 2 <sub>ε</sub> commands:	
<code>\ExplSyntaxOn</code>	15	<code>\bm@pmb@</code>	18
H		<code>\dimen@</code>	20, 24, 25, 26
hbox commands:		<code>\m@th</code>	19
<code>\hbox_set:Nn</code>	19	<code>\tw@</code>	20
K		W	
<code>\kern</code>	24, 26	<code>\wd</code>	20