Test of the **bracealign** package compatibility with the **mathtools** package

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1 \underbrace / \overbrace
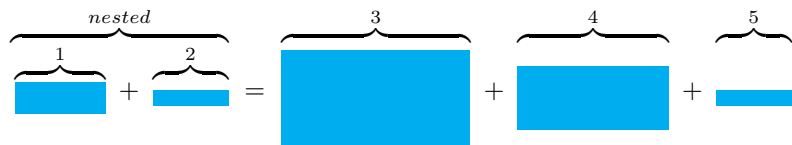
```
\[
  \begin{bracealign}
    \underbrace{
      \begin{bracealign}
        \underbrace{\medcontent}_{1}
        ~+~
        \underbrace{\smallcontent}_{2}
      \end{bracealign}
    }_{nested}
    ~=~
    \underbrace{\hugecontent}_{3}
    ~+~
    \underbrace{\bigcontent}_{4}
    ~+~
    \underbrace{\smallcontent}_{5}
  \end{bracealign}
\]
```

```
\[
  \begin{bracealign}
    \overbrace{
      \begin{bracealign}
        \overbrace{\medcontent}^{1}
        ~+~
        \overbrace{\smallcontent}^{2}
      \end{bracealign}
    }^{nested}
    ~=~
    \overbrace{\hugecontent}^{3}
    ~+~
    \overbrace{\bigcontent}^{4}
    ~+~
    \overbrace{\smallcontent}^{5}
  \end{bracealign}
\]
```
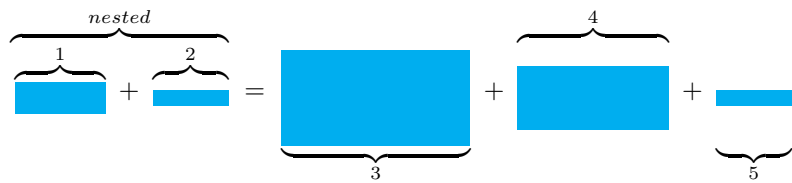


```
\[
  \begin{bracealign}
    \overbrace{
      \begin{bracealign}
        \overbrace{\medcontent}^{1}
        ~+~
        \overbrace{\smallcontent}^{2}
      \end{bracealign}
    }^{nested}
    ~=~
    \underbrace{\hugecontent}_{3}
    ~+~
    \overbrace{\bigcontent}^{4}
    ~+~
    \underbrace{\smallcontent}_{5}
  \end{bracealign}
\]
```
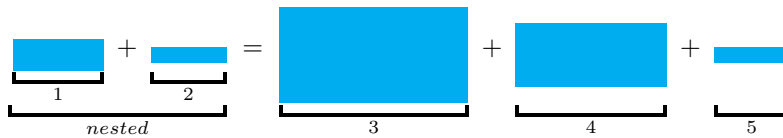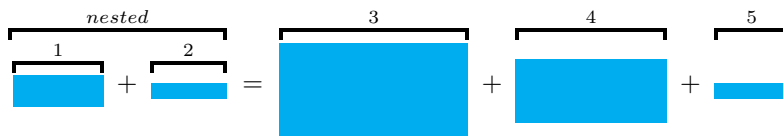
2 \underbracket / \overbracket

```
\[
  \begin{bracealign}
    \underbracket{
      \begin{bracealign}
        \underbracket{\medcontent}_{1}
        ~+~
        \underbracket{\smallcontent}_{2}
      \end{bracealign}
    }_{nested}
    ~=~
    \underbracket{\hugecontent}_{3}
    ~+~
    \underbracket{\bigcontent}_{4}
    ~+~
    \underbracket{\smallcontent}_{5}
  \end{bracealign}
\]
```



```
\[
  \begin{bracealign}
    \overbracket{
      \begin{bracealign}
        \overbracket{\medcontent}^{1}
        ~+~
        \overbracket{\smallcontent}^{2}
      \end{bracealign}
    }^{nested}
    ~=~
    \overbracket{\hugecontent}^{3}
    ~+~
    \overbracket{\bigcontent}^{4}
    ~+~
    \overbracket{\smallcontent}^{5}
  \end{bracealign}
\]
```
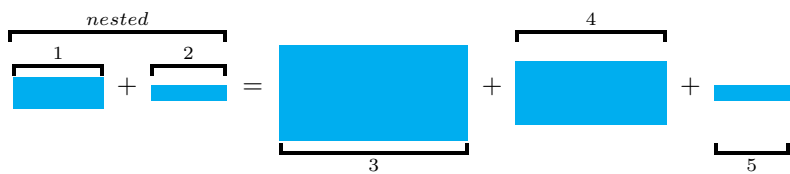
```
\[
  \begin{bracealign}
    \overbracket{
      \begin{bracealign}
        \overbracket{\medcontent}^{1}
        ~+~
        \overbracket{\smallcontent}^{2}
      \end{bracealign}
    }^{nested}
    ~=~
    \underbracket{\hugecontent}_{3}
    ~+~
    \overbracket{\bigcontent}^{4}
    ~+~
    \underbracket{\smallcontent}_{5}
  \end{bracealign}
\]
```

2.1 Check of commands definition

```
 Before \textsf{bracealign}:\newline
 ``\expandafter\meaning\csname underbrace\endcsname"
\par\bigskip
\begin{bracealign}
  Inside \textsf{bracealign}:\newline
  ``\expandafter\meaning\csname underbrace\endcsname"
\end{bracealign}
\par\bigskip
 Before \textsf{bracealign}:\newline
 ``\expandafter\meaning\csname underbrace\endcsname"
```

Before bracealign:

"macro:#1->\mathop {\vtop {\m@th \ialign {##\crcr $\hfil \displaystyle {#1}\hfil $\crcr \noalign {\kern .7\fontdimen 5\textfont 2\nointerlineskip }\upbracefill \crcr \noalign {\kern .5\fontdimen 5\textfont 2}}}}\limits "

Inside bracealign:

"\long macro:#1->\use:c {___bracealign_underbrace_std_cmd:n}{\vphantom {\tl_use:c {l___bracealign_underbrace_strutcontent_tl}}#1}"

Before bracealign:

"macro:#1->\mathop {\vtop {\m@th \ialign {##\crcr $\hfil \displaystyle {#1}\hfil $\crcr \noalign {\kern .7\fontdimen 5\textfont 2\nointerlineskip }\upbracefill \crcr \noalign {\kern .5\fontdimen 5\textfont 2}}}}\limits "

```
Before \textsf{bracealign}:\newline
``\expandafter\meaning\csname underbracket\endcsname"
\par\bigskip
\begin{bracealign}
  Inside \textsf{bracealign}:\newline
  ``\expandafter\meaning\csname underbracket\endcsname"
\end{bracealign}
\par\bigskip
Before \textsf{bracealign}:\newline
``\expandafter\meaning\csname underbracket\endcsname"
```

Before bracealign:

   "macro:->\@ifnextchar [{\MT_underbracket_I:w
  }{\MT_underbracket_I:w [\l_MT_bracketheight_fdim]}"

Inside bracealign:

   "\long macro:#1->\use:c {___bracealign__un-
   derbracket_std_cmd:n}{\vphantom {\tl_use:c
  {l___bracealign_underbracket_strutcontent_tl}}#1}"

Before bracealign:

   "macro:->\@ifnextchar [{\MT_underbracket_I:w
  }{\MT_underbracket_I:w [\l_MT_bracketheight_fdim]}"