Test of the **bracealign** package compatibility with the **libertinust1math** package
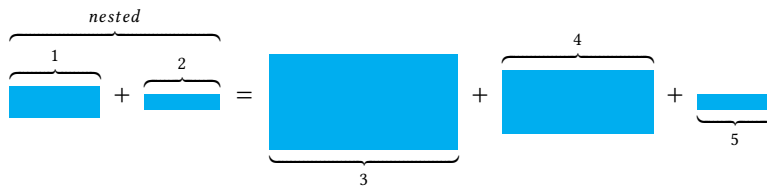
Julien Labbé

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1 \underbrace / \overbrace
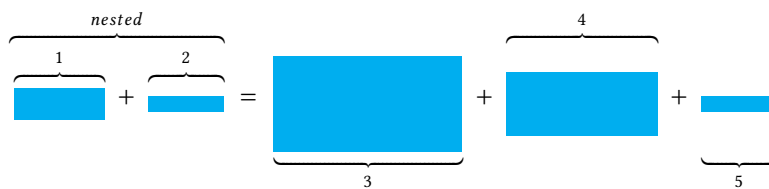
1.1 Without **bracealign**

```
\[
  \overbrace{
    \overbrace{\medcontent}^{1}
    ~+~
    \overbrace{\smallcontent}^{2}
  }^{nested}
  ~=~
  \underbrace{\hugecontent}_{3}
  ~+~
  \overbrace{\bigcontent}^{4}
  ~+~
  \underbrace{\smallcontent}_{5}
\]
```
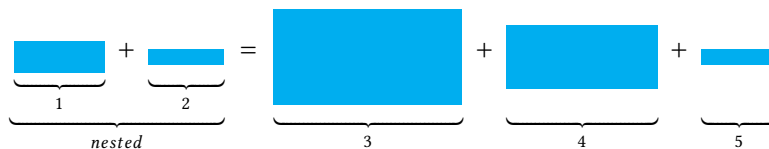
1.2 With bracealign

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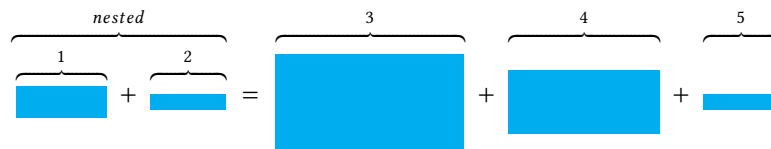


```
\[
  \begin{bracealign}
    \underbrace{
      \begin{bracealign}
        \underbrace{\medcontent}_{1}
        ~+~
        \underbrace{\smallcontent}_{2}
      \end{bracealign}
    }_{nested}
    ~=~
    \underbrace{\hugecontent}_{3}
    ~+~
    \underbrace{\bigcontent}_{4}
    ~+~
    \underbrace{\smallcontent}_{5}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

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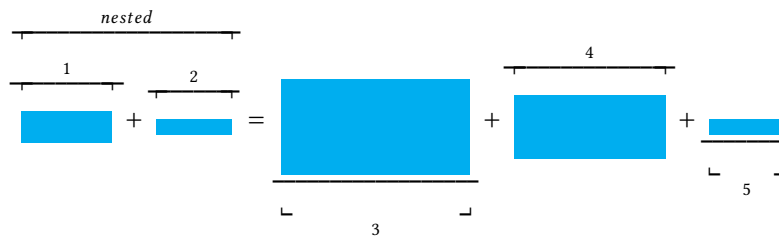

2 \underbracket / \overbracket

2.1 Without bracealign
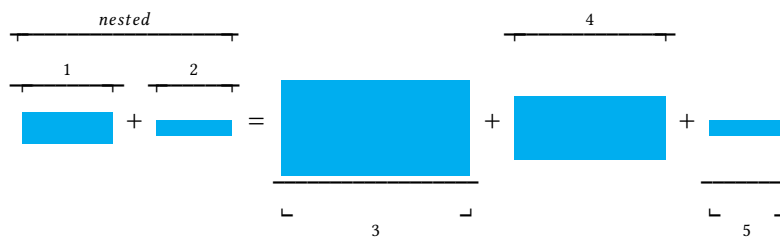
```
\[
  \overbracket{
    \overbracket{\medcontent}^{1}
    ~+~
    \overbracket{\smallcontent}^{2}
  }^{nested}
  ~=~
  \underbracket{\hugecontent}_{3}
  ~+~
  \overbracket{\bigcontent}^{4}
  ~+~
  \underbracket{\smallcontent}_{5}
\]
```

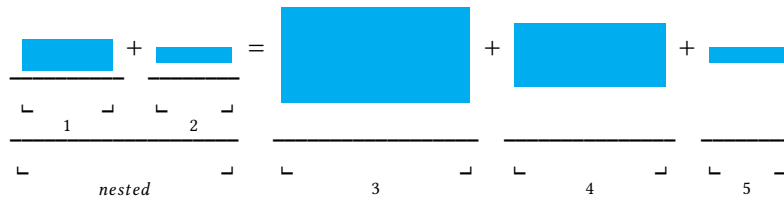## 2.2 With **bracealign**

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

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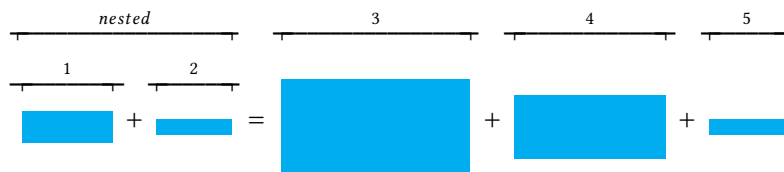


```
\[
  \begin{bracealign}
    \overbracket{
      \begin{bracealign}
        \overbracket{\medcontent}^{1}
        ~+~
        \overbracket{\smallcontent}^{2}
      \end{bracealign}
    }^{nested}
    ~=~
    \overbracket{\hugecontent}^{3}
    ~+~
    \overbracket{\bigcontent}^{4}
    ~+~
    \overbracket{\smallcontent}^{5}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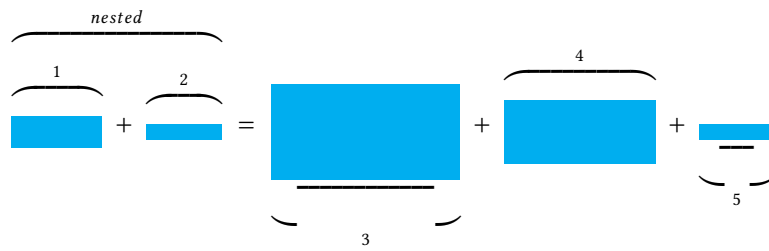
3 \underparen / \overbracket

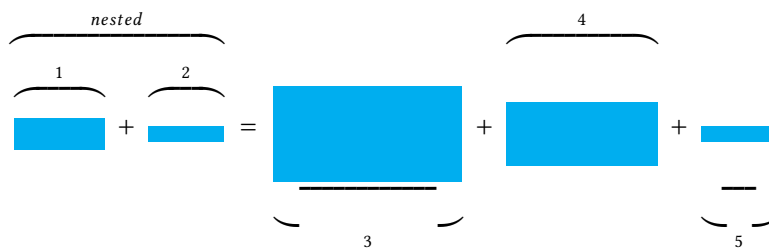## 3.1 Without **bracealign**

```
\[
  \overparen{
    \overparen{\medcontent}^{1}
    ~+~
    \overparen{\smallcontent}^{2}
  }^{nested}
  ~=~
  \underparen{\hugecontent}_{3}
  ~+~
  \overparen{\bigcontent}^{4}
  ~+~
  \underparen{\smallcontent}_{5}
\]
```

3.2 With **bracealign**

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

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


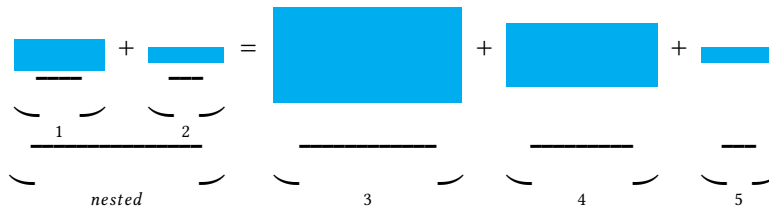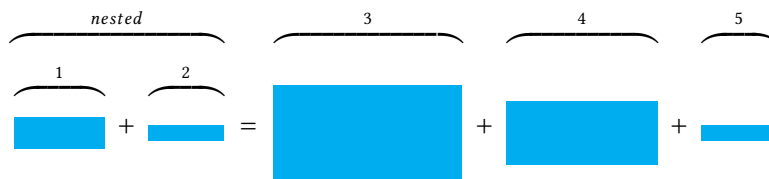```
\[
  \begin{bracealign}
    \overparen{
      \begin{bracealign}
        \overparen{\medcontent}^{1}
        ~+~
        \overparen{\smallcontent}^{2}
      \end{bracealign}
    }^{nested}
    ~=~
    \overparen{\hugecontent}^{3}
    ~+~
    \overparen{\bigcontent}^{4}
    ~+~
    \overparen{\smallcontent}^{5}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

## 3.3 Check of commands definition

## 3.4 \underbrace

```
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-¿"libus@underbrace –brace"–#1""

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-¿"libus@underbrace –brace"–#1""

3.5 \underbracket

```
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:#1-¿"libus@underbrace –bracket"–#1""

Inside bracealign:
""long macro:#1-¿"use:c –"bracealign"underbracket"std"cmd:n"–"vphantom
–"tl"use:c –l"bracealign"underbracket"strutcontent"tl""""#1""

Before bracealign:
"macro:#1-¿"libus@underbrace –bracket"–#1""

3.6 \underparen

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

Before bracealign:
　　　　　　"macro:#1-¿"libus@underbrace –paren″–#1″″

Inside bracealign:
"“long macro:#1-¿"use:c –¨bracealign˙underparen˙std˙cmd:n″–"vphantom
　　　–"tl˙use:c –l¨bracealign˙underparen˙strutcontent˙tl″″#1″″

Before bracealign:
　　　　　　"macro:#1-¿"libus@underbrace –paren″–#1″″