Test of the **overarrows** package predefined commands

Julien Labbé

January 16, 2023

1 \vv

```
\TestOverArrow*{vv}
```

Test of \vv and \vv* macros

\vv for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\vec{v}$	$\vec{v}$	$\vec{v}$	$\vec{v}$
$\vec{AB}$	$\vec{AB}$	$\vec{AB}$	$\vec{AB}$
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{my\ long\ vector}$	$\overrightarrow{my\ long\ vector}$	$\overrightarrow{my\ long\ vector}$	$\overrightarrow{my\ long\ vector}$

\vv kerning

$$\vec{t}\,_{\vec{u}\,\vec{v}} \qquad \vec{\imath}\,_0 \qquad \vec{v} = \vec{v}\,_x + \vec{v}\,_y + \vec{v}\,_z = v_x\,\vec{\imath} + v_y\,\vec{\jmath} + v_z\,\vec{k}$$

\vv* kerning

$$\vec{t}_{\vec{u}\vec{v}} \qquad \vec{\imath}_0 \qquad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x\vec{\imath} + v_y\vec{\jmath} + v_z\vec{k}$$

2 \overrightarrow

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\overrightarrow{\mathrm{grad}}$	$\overrightarrow{\mathrm{grad}}$	$\overrightarrow{\mathrm{grad}}$	$\overrightarrow{\mathrm{grad}}$
$\overrightarrow{my\ long\ vector}$	$\overrightarrow{my\ long\ vector}$	$\overrightarrow{my\ long\ vector}$	$\overrightarrow{my\ long\ vector}$

3 \underrightarrow

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\underrightarrow{v}$	$\underrightarrow{v}$	$\underrightarrow{v}$	$\underrightarrow{v}$
$\underrightarrow{AB}$	$\underrightarrow{AB}$	$\underrightarrow{AB}$	$\underrightarrow{AB}$
$\underrightarrow{\mathrm{grad}}$	$\underrightarrow{\mathrm{grad}}$	$\underrightarrow{\mathrm{grad}}$	$\underrightarrow{\mathrm{grad}}$
$\underrightarrow{my\ long\ vector}$	$\underrightarrow{my\ long\ vector}$	$\underrightarrow{my\ long\ vector}$	$\underrightarrow{my\ long\ vector}$

4 \overleftarrow

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overleftarrow{v}$	$\overleftarrow{v}$	$\overleftarrow{v}$	$\overleftarrow{v}$
$\overleftarrow{AB}$	$\overleftarrow{AB}$	$\overleftarrow{AB}$	$\overleftarrow{AB}$
$\overleftarrow{\mathrm{grad}}$	$\overleftarrow{\mathrm{grad}}$	$\overleftarrow{\mathrm{grad}}$	$\overleftarrow{\mathrm{grad}}$
$\overleftarrow{my\ long\ vector}$	$\overleftarrow{my\ long\ vector}$	$\overleftarrow{my\ long\ vector}$	$\overleftarrow{my\ long\ vector}$

5 \underleftarrow

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\underleftarrow{v}$	$\underleftarrow{v}$	$\underleftarrow{v}$	$\underleftarrow{v}$
$\underleftarrow{AB}$	$\underleftarrow{AB}$	$\underleftarrow{AB}$	$\underleftarrow{AB}$
$\underleftarrow{\text{grad}}$	$\underleftarrow{\text{grad}}$	$\underleftarrow{\text{grad}}$	$\underleftarrow{\text{grad}}$
$\underleftarrow{my\ long\ vector}$	$\underleftarrow{my\ long\ vector}$	$\underleftarrow{my\ long\ vector}$	$\underleftarrow{my\ long\ vector}$

6 \overleftrightarrow

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overleftrightarrow{v}$	$\overleftrightarrow{v}$	$\overleftrightarrow{v}$	$\overleftrightarrow{v}$
$\overleftrightarrow{AB}$	$\overleftrightarrow{AB}$	$\overleftrightarrow{AB}$	$\overleftrightarrow{AB}$
$\overleftrightarrow{\text{grad}}$	$\overleftrightarrow{\text{grad}}$	$\overleftrightarrow{\text{grad}}$	$\overleftrightarrow{\text{grad}}$
$\overleftrightarrow{my\ long\ vector}$	$\overleftrightarrow{my\ long\ vector}$	$\overleftrightarrow{my\ long\ vector}$	$\overleftrightarrow{my\ long\ vector}$

7 \underleftrightarrow

8 \overrightharpoonup

9 \underrightharpoonup

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
v	v	v	v
AB	AB	AB	AB
grad	grad	grad	grad
my long vector	my long vector	my long vector	my long vector

10 \overrightharpoondown

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$	$\overrightarrow{v}$
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\overrightarrow{grad}$	$\overrightarrow{grad}$	$\overrightarrow{grad}$	$\overrightarrow{grad}$
my long vector	my long vector	my long vector	my long vector

11 \underrightharpoondown

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\underrightharpoondown{v}$	$\underrightharpoondown{v}$	$\underrightharpoondown{v}$	$\underrightharpoondown{v}$
$\underrightharpoondown{AB}$	$\underrightharpoondown{AB}$	$\underrightharpoondown{AB}$	$\underrightharpoondown{AB}$
$\underrightharpoondown{\mathrm{grad}}$	$\underrightharpoondown{\mathrm{grad}}$	$\underrightharpoondown{\mathrm{grad}}$	$\underrightharpoondown{\mathrm{grad}}$
$\underrightharpoondown{my\ long\ vector}$	$\underrightharpoondown{my\ long\ vector}$	$\underrightharpoondown{my\ long\ vector}$	$\underrightharpoondown{my\ long\ vector}$

12 \overleftharpoonup

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overleftharpoonup{v}$	$\overleftharpoonup{v}$	$\overleftharpoonup{v}$	$\overleftharpoonup{v}$
$\overleftharpoonup{AB}$	$\overleftharpoonup{AB}$	$\overleftharpoonup{AB}$	$\overleftharpoonup{AB}$
$\overleftharpoonup{\mathrm{grad}}$	$\overleftharpoonup{\mathrm{grad}}$	$\overleftharpoonup{\mathrm{grad}}$	$\overleftharpoonup{\mathrm{grad}}$
$\overleftharpoonup{my\ long\ vector}$	$\overleftharpoonup{my\ long\ vector}$	$\overleftharpoonup{my\ long\ vector}$	$\overleftharpoonup{my\ long\ vector}$

13 \underleftharpoonup

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\underleftharpoonup{v}$	$\underleftharpoonup{v}$	$\underleftharpoonup{v}$	$\underleftharpoonup{v}$
$\underleftharpoonup{AB}$	$\underleftharpoonup{AB}$	$\underleftharpoonup{AB}$	$\underleftharpoonup{AB}$
$\underleftharpoonup{\mathrm{grad}}$	$\underleftharpoonup{\mathrm{grad}}$	$\underleftharpoonup{\mathrm{grad}}$	$\underleftharpoonup{\mathrm{grad}}$
$\underleftharpoonup{my\ long\ vector}$	$\underleftharpoonup{my\ long\ vector}$	$\underleftharpoonup{my\ long\ vector}$	$\underleftharpoonup{my\ long\ vector}$

14 \overleftharpoondown

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overleftharpoondown{v}$	$\overleftharpoondown{v}$	$\overleftharpoondown{v}$	$\overleftharpoondown{v}$
$\overleftharpoondown{AB}$	$\overleftharpoondown{AB}$	$\overleftharpoondown{AB}$	$\overleftharpoondown{AB}$
$\overleftharpoondown{\mathrm{grad}}$	$\overleftharpoondown{\mathrm{grad}}$	$\overleftharpoondown{\mathrm{grad}}$	$\overleftharpoondown{\mathrm{grad}}$
$\overleftharpoondown{my\ long\ vector}$	$\overleftharpoondown{my\ long\ vector}$	$\overleftharpoondown{my\ long\ vector}$	$\overleftharpoondown{my\ long\ vector}$

15 \underleftharpoondown

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overleftharpoondown{v}$	$\overleftharpoondown{v}$	$\overleftharpoondown{v}$	$\overleftharpoondown{v}$
$\overleftharpoondown{AB}$	$\overleftharpoondown{AB}$	$\overleftharpoondown{AB}$	$\overleftharpoondown{AB}$
$\overleftharpoondown{\mathrm{grad}}$	$\overleftharpoondown{\mathrm{grad}}$	$\overleftharpoondown{\mathrm{grad}}$	$\overleftharpoondown{\mathrm{grad}}$
$\overleftharpoondown{my\ long\ vector}$	$\overleftharpoondown{my\ long\ vector}$	$\overleftharpoondown{my\ long\ vector}$	$\overleftharpoondown{my\ long\ vector}$

16 \overbar

Test of \overbar and \overbar* macros

\overbar for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overline{v}$	$\overline{v}$	$\overline{v}$	$\overline{v}$
$\overline{AB}$	$\overline{AB}$	$\overline{AB}$	$\overline{AB}$
$\overline{\mathrm{grad}}$	$\overline{\mathrm{grad}}$	$\overline{\mathrm{grad}}$	$\overline{\mathrm{grad}}$
$\overline{my\ long\ vector}$	$\overline{my\ long\ vector}$	$\overline{my\ long\ vector}$	$\overline{my\ long\ vector}$

\overbar kerning

$$\overline{t}_{\,\overline{u}_{\,\overline{v}}} \qquad \overline{\imath}_{\,0} \qquad \overline{v} = \overline{v}_x + \overline{v}_y + \overline{v}_z = v_x\,\overline{\imath} + v_y\,\overline{\jmath} + v_z\,\overline{k}$$

\overbar* kerning

$$\overline{t}_{\overline{u}_{\overline{v}}} \qquad \overline{\imath}_0 \qquad \overline{v} = \overline{v}_x + \overline{v}_y + \overline{v}_z = v_x\,\overline{\imath} + v_y\,\overline{\jmath} + v_z\,\overline{k}$$

17 \underbar

Test of \underbar and \underbar* macros

\underbar for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\underline{v}$	$\underline{v}$	$\underline{v}$	$\underline{v}$
$\underline{AB}$	$\underline{AB}$	$\underline{AB}$	$\underline{AB}$
$\underline{\text{grad}}$	$\underline{\text{grad}}$	$\underline{\text{grad}}$	$\underline{\text{grad}}$
$\underline{my\ long\ vector}$	$\underline{my\ long\ vector}$	$\underline{my\ long\ vector}$	$\underline{my\ long\ vector}$

\underbar kerning

$$\underline{t}_{\underline{u}_{\underline{v}}} \qquad \underline{\imath}_0 \qquad \underline{v} = \underline{v}_x + \underline{v}_y + \underline{v}_z = v_x\,\underline{\imath} + v_y\,\underline{\jmath} + v_z\,\underline{k}$$

\underbar* kerning

$$\underline{t_{u_v}} \qquad \underline{\imath_0} \qquad \underline{v} = \underline{v}_x + \underline{v}_y + \underline{v}_z = v_x\,\underline{\imath} + v_y\,\underline{\jmath} + v_z\,\underline{k}$$