Test of the overarrows package without options

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February 15, 2023

1 Loading the package without options

```
\usepackage{overarrows}
```

2 Tests of type symb with amsmath config

```
\NewOverArrowCommand{amsvector}{amsmath}
\TestOverArrow*{amsvector}
```

Test of \amsvector and \amsvector* macros

\amsvector for different math styles

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

\amsvector kerning

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

\amsvector* kerning

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

```
\NewOverArrowCommand{amsstrictvector}{amsmath=strict}
\TestOverArrow*{amsstrictvector}
```

Test of \amsstrictvector and \amsstrictvector* macros

\amsstrictvector for different math styles

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

\amsstrictvector kerning

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

\amsstrictvector* kerning

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

3 Tests of type `symb` with `esvect` config

```
\NewOverArrowCommand{esvector}{esvect}
\TestOverArrow*{esvector}
```

Test of `\esvector` and `\esvector*` macros

`\esvector` for different math styles

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

`\esvector` kerning

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

`\esvector*` kerning

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

```
\NewOverArrowCommand{esstrictvector}{esvect=strict}
\TestOverArrow*{esstrictvector}
```

Test of \esstrictvector and \esstrictvector* macros

\esstrictvector for different math styles

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

\esstrictvector kerning

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

\esstrictvector* kerning

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

4 Tests of type `symb` with options

```
\NewOverArrowCommand{testovertextarrow}{%
  min length = 30,
  space before arrow=5ex,
  space after arrow=-.5ex,
  shift left = -5,
  shift right = -5,
  start={\Leftarrow},
  trim start=5,
  middle={\Relbar},
  trim middle=5,
  end={\Rightarrow},
  trim end=5,
  detect subscripts,
}
\TestOverArrow*{testovertextarrow}
```

Test of `\testovertextarrow` and `\testovertextarrow*` macros

`\testovertextarrow` for different math styles

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

`\testovertextarrow` kerning

$\overleftarrow{t}$ $\overleftarrow{t_0}$ $\overleftarrow{v}=\overleftarrow{v_x}+\overleftarrow{v_y}+\overleftarrow{v_z}= v_x\overleftarrow{i}+ v_y\overleftarrow{j}+ v_z\overleftarrow{k}$

$\overleftarrow{u}$

$\overleftarrow{u}$

`\testovertextarrow*` kerning

$\overleftarrow{t}$ $\overleftarrow{t_0}$ $\overleftarrow{v}=\overleftarrow{v_x}+\overleftarrow{v_y}+\overleftarrow{v_z}= v_x\overleftarrow{i}+ v_y\overleftarrow{j}+ v_z\overleftarrow{k}$

$\overleftarrow{u}$

$\overleftarrow{u}$

5 Tests of type `picture` without options

```
\NewOverArrowCommand[picture]{picvector}{}
\TestOverArrow*{picvector}
```

Test of \picvector and \picvector* macros

\picvector for different math styles

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

\picvector kerning

$\overrightarrow{t}_{\overrightarrow{u}_{\overrightarrow{v}}}$ $\overrightarrow{i}_0$ $\overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x\,\overrightarrow{i} + v_y\,\overrightarrow{j} + v_z\,\overrightarrow{k}$

\picvector* kerning

$\overrightarrow{t}_{\overrightarrow{u}_{\overrightarrow{v}}}$ $\overrightarrow{i}_0$ $\overrightarrow{v} = \overrightarrow{v}_x + \overrightarrow{v}_y + \overrightarrow{v}_z = v_x\,\overrightarrow{i} + v_y\,\overrightarrow{j} + v_z\,\overrightarrow{k}$

6 Tests of type `picture` with options

```
\NewOverArrowCommand[picture]{thinnerpicvector}{%
  thinner,
}
\NewOverArrowCommand[picture]{thickerpicvector}{%
  line thickness=2\overarrowthickness,
}

$$ \thinnerpicvector{v} \qquad \picvector{v} \qquad \thickerpicvector{v} $$
```

$\overrightarrow{v}$ $\overrightarrow{v}$ $\overrightarrow{v}$

```
\NewOverArrowCommand[picture]{testoverpicarrow}{%
  shift left=2,
  shift right=-5,
  min length=30,
  geometry={(\overarrowlength,2ex)(0,-1ex)},
  picture command={%
    \put(0.8\overarrowlength,0.2\overarrowlength){%
      \circle{0.2\overarrowlength}
    }%
    \put(0,0){\vector(4,1){0.85\overarrowlength}}},%
}
\TestOverArrow*{testoverpicarrow}
```