Package overarrows examples

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 \overrightarrow{v}

 \overrightarrow{v}

 \vec{v}

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1	Default arrows							
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$							

 \overrightarrow{v}

 \overrightarrow{v}

 \overrightarrow{v}

 \overrightarrow{v}

 \overrightarrow{v}

2 Package esvect arrows

esveca	esvecb	esvecc	esvecd	esvece	esvecf	esvecg	esvech
\overrightarrow{i}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{i}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}	\overrightarrow{v}

3 Arrow with an hook and two heads

trim end=2,			
estOverArrow{over	hooktwoheadrightarr	ow}	
\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
	4		
\overleftrightarrow{v}	$\overset{\leadsto}{v}$	$\stackrel{\longleftrightarrow}{v}$	$\stackrel{\longleftarrow}{v}$
$\stackrel{\overleftrightarrow{v}}{\widetilde{AB}}$	$\stackrel{\widetilde{v}}{\widetilde{AB}}$	$\stackrel{\hookleftarrow}{v}$ $\stackrel{\longleftarrow}{AB}$	$\overset{\longleftarrow}{v}$, $\overset{\longleftarrow}{AB}$
-			Ü

4 Left-right arrow

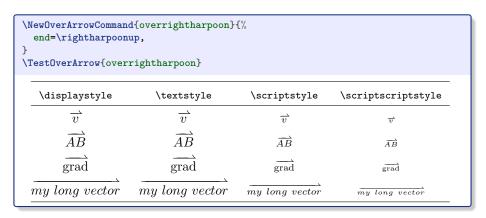
Note: $\oldsymbol{\colored}$ voerleftrightarrow is already defined by amsmath package.

```
\verb|\RenewOverArrowCommand{overleftrightarrow}{|}{|}{|}{|}{|}{|}
   start=\varleftarrow,% from old-arrows package
   end=\varrightarrow,% from old-arrows package
   trim start=7,
   trim end=7,
   center arrow,
\TestOverArrow{overleftrightarrow}
     \displaystyle
                                       \textstyle
                                                                   \scriptstyle
                                                                                              \scriptscriptstyle
             \overrightarrow{v}
                                             \overrightarrow{v}
                                            \overleftrightarrow{AB}
             \overrightarrow{AB}
                                                                           \overrightarrow{AB}
                                                                                                           \overleftrightarrow{AB}
            grad
                                            grad
                                                                          \stackrel{\longleftrightarrow}{\operatorname{grad}}
                                                                                                          \overrightarrow{\operatorname{grad}}
                                  my long vector
  my long vector
                                                                  my long vector
                                                                                                   \stackrel{\longleftarrow}{my\ long\ vector}
```

5 Arrow with a double line

```
\verb|\NewOverArrowCommand{OverRightarrow}{|}|
   start={\smallermathstyle\Relbar},
   middle={\smallermathstyle\Relbar},
   end={\Rightarrow},
   trim=4,
   space after arrow=.25ex,
\TestOverArrow{OverRightarrow}
     \displaystyle
                                         \textstyle
                                                                      \scriptstyle
                                                                                                 \scriptscriptstyle
              \overrightarrow{\overline{v}}
                                                \overrightarrow{\overline{v}}
                                                                              \overrightarrow{\overline{v}}
             \overrightarrow{\overline{AB}}
                                              \overrightarrow{\overline{AB}}
                                                                              \overrightarrow{\overline{AB}}
                                                                                                               \overrightarrow{AB}
                                                                                                              \Longrightarrow grad
                                                                             \overrightarrow{\operatorname{grad}}
            grad
                                             grad
                                    my long vector
                                                                                                      my long vector
   my long vector
                                                                     my long vector
```

6 Right and left harpoons

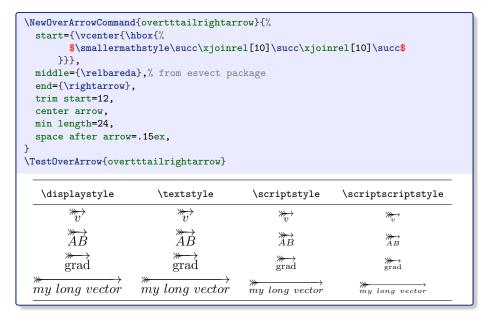


```
\NewOverArrowCommand{overleftharpoon}{%
  start=\leftharpoonup,
  end=\relbar,
  shift left=0,
  shift right=2,
\TestOverArrow{overleftharpoon}
    \displaystyle
                                \textstyle
                                                       \scriptstyle
                                                                             \scriptscriptstyle
           \overline{v}
                                     \overline{v}
                                                              \overline{v}
                                    \overleftarrow{AB}
          \overline{AB}
                                                             \overline{AB}
                                                                                        \overline{AB}
         grad
                                   grad
                                                             grad
                                                                                       \overline{\text{grad}}
  my\ long\ vector
                            my long vector
                                                      my long vector
                                                                                 my long vector
```

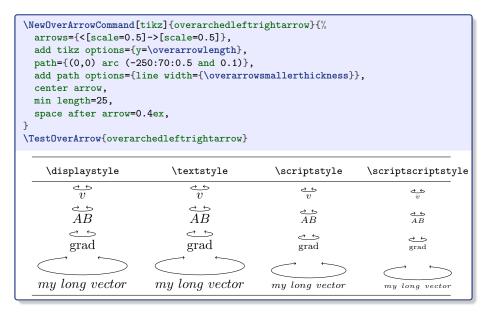
7 Double arrow, right and left inverted

```
\NewOverArrowCommand{overrightleftarrow}{%
  \verb|start=\lceil U \rceil \{ lasy \} \{m\} \{n\} \land \{41\} \},
  \verb|end=\left\{u\}_{n}^{m}_{n}\right\},
  trim start=0.7,
  trim end=0.7,
  min length=20,
  shift leftright=-2,
\TestOverArrow{overrightleftarrow}
    \displaystyle
                                 \textstyle
                                                         \scriptstyle
                                                                                \scriptscriptstyle
           \overleftarrow{v}
                                      \overleftarrow{v}
                                                                \overleftarrow{v}
          \overrightarrow{AB}
                                      \overrightarrow{AB}
                                                                \overleftarrow{AB}
                                                                                           \overleftarrow{AB}
          grad
                                     grad
                                                               grad
                                                                                          \overrightarrow{\operatorname{grad}}
  my long vector
                             my long vector
                                                        my long vector
                                                                                    my \ long \ vector
```

8 Arrow with a triple tail



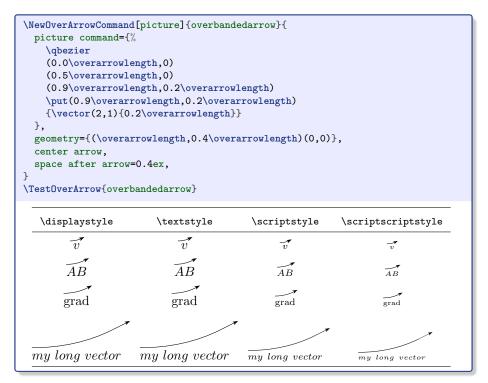
9 Arched left and right arrow, with tikz package



10 Loop and arrow, with PSTricks

```
\NewOverArrowCommand[pstricks]{overloopandarrow}{
  pstricks command={%
     \pscurve{->}(0,0)
     (0.6\overarrowlength, 0.05\overarrowlength)
     (0.5\overarrowlength, 0.1\overarrowlength)
     (0.4\overarrowlength,0.05\overarrowlength)
     (\overarrowlength,0)
  },
  geometry={(0,0)(\overarrowlength,0.2\overarrowlength)},
  space after arrow=2pt, min length=20,
  geometry={(0,0)(\overarrowlength,0.2\overarrowlength)},
\TestOverArrow{overloopandarrow}
   \displaystyle
                             \textstyle
                                                   \scriptstyle
                                                                       \scriptscriptstyle
                                  \overrightarrow{v}
                                                         \overrightarrow{v}
         \overrightarrow{AB}
                                 \overrightarrow{AB}
                                                         \overrightarrow{AB}
                                                                                 \overrightarrow{AB}
        \overline{\text{grad}}
                                 \overline{\operatorname{grad}}
                                                        grad
 my long vector
                          my long vector
                                                  my long vector
                                                                           my long vector
```

11 Banded arrow, with picture environment



12 Under arrow

Note: \underleftrightarrow is already defined by amsmath package.

```
\DeclareOverArrowCommand{underleftrightarrow}{%
   start=\varleftarrow,
   center arrow,
   arrow under,
\TestOverArrow{underleftrightarrow}
 \displaystyle
                              \textstyle
                                                     \scriptstyle
                                                                           \scriptscriptstyle
         \stackrel{v}{\longleftrightarrow}
                                   \stackrel{v}{\longleftrightarrow}
        <u>АВ</u>
                                  ĄВ
                                                           AB
                                                                                     AB
       grad
                                 grad
                                                           \operatorname{grad}
                                                                                     \operatorname{grad}
                          my long vector
my long vector
                                                    my long vector
                                                                               my long vector
```