The amsldoc and amsdtx document classes

American Mathematical Society
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1 Introduction
This file is the source for two document classes, amsldoc (used for the \textit{AMS-}
\LaTeX{} user’s guide) and amsdtex (used for printing AMS .dtex files). The generic
book class is used as a base, but the amsdtex class is modified to serve as an
article-type class. This affects the form of documentation files mainly in the use
of \texttt{\textbackslash maketitle} and \texttt{\textbackslash chapter}.

Standard starting pieces. (Note: the reason each \texttt{\textbackslash ProvidesClass} command
is placed on a line by itself, with separate begin and end guards for docstripping,
is to make automatic update of file date and version slightly easier and more
robust.)
\begin{verbatim}
1 \NeedsTeXFormat{LaTeX2e} % LaTeX 2.09 can't be used (nor non-LaTeX)
2 [1995/06/01] % LaTeX date must be June 1995 or later
3 (+amsldoc)
4 \ProvidesClass{amsldoc}[2009/08/19 v2.07]
5 (/amsldoc)
6 (+amsdtex)
7 \ProvidesClass{amsdtex}[2009/08/19 v2.07]
8 (/amsdtex)
\end{verbatim}

2 Implementation
Start with the generic book class as a base.
\begin{verbatim}
9 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{book}}
\end{verbatim}
Table 1. Features of the amsldoc and amsdtx classes

<table>
<thead>
<tr>
<th>Command Name</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>\cn</td>
<td>To print a user command name: \cn{title}; leading backslash can be optionally included for control symbols: \cn{%}. The \cn command works properly even in macro arguments (compare to, e.g., \verb\newif). But beware of a fragile control symbol (are there any?) in a moving argument.</td>
</tr>
<tr>
<td>\cs</td>
<td>‘Control sequence’: to print an internal command name, not intended for the end user</td>
</tr>
<tr>
<td>\env</td>
<td>To print an environment name: \env{table}</td>
</tr>
<tr>
<td>\pkg</td>
<td>To print a package name: \pkg{eufrak}</td>
</tr>
<tr>
<td>\cls</td>
<td>To print a class name: \cls{book}</td>
</tr>
<tr>
<td>\opt</td>
<td>To print the name of a class or package option: \opt{twocolumn}</td>
</tr>
<tr>
<td>\bst</td>
<td>To print the name of a Bib\TeX{} style \bst{amsalpha}</td>
</tr>
<tr>
<td>\fn</td>
<td>To print a file name or font name: \fn{T1enc.def}, \fn{cmsy10}</td>
</tr>
<tr>
<td>\fnt</td>
<td>To print a font name: \fnt{cmsy10}</td>
</tr>
<tr>
<td>\cnt</td>
<td>To print a counter name: \cnt{topnumber}</td>
</tr>
<tr>
<td>\qc</td>
<td>To quote a single character: \qc{%}; this works properly for special characters, even in macro arguments, unlike e.g., \verb%;</td>
</tr>
<tr>
<td>\latex/ etc.</td>
<td>Convenient forms of \LaTeX{}, \TeX{}, \BibTeX{}, etc. that are easier to type and have a trailing slash to eliminate the following-space problem (without needing different markup in different contexts)</td>
</tr>
</tbody>
</table>

10 \ProcessOptions
11 \LoadClass{book}
12 \IfFileExists{url.sty}{%
13 \RequirePackage{url}\relax
14 \@gobble
15 }{%
16 \@firstofone
17 }
18 {
19 \DeclareRobustCommand{\url}[1]{%
20 \def\@tempa[#1]{%
21 \texttt{\urlsetup \$\expandafter\strip@prefix\meaning\@tempa\$}%
22 }%
23 \def\urlsetup{%
24 \check@mathfonts \textfont@me\the\font \textfont@z\the\font
25 \urlfix +\urlfix=\urlfix:\urlfix\-\urlfix\-\urlfix\,\urlfix\;%
3. INDEXING PRIMITIVES

Unlike amsdtx, amsldoc doesn’t load the doc package, so we need to provide the following logical names. The values are consistent with makeindex’s default conventions.

3.1 amsldoc

\def\actualchar{@}
\def\quotechar{“}
\def\levelchar{!}
\def\encapchar{|}
\def\verbatimchar{+}

We also need the \ifcodeline@index switch.
\newif\ifcodeline@index
\let\@xp\expandafter

\autoindex When generating a codeline index, this encapsulates the page number in italics.
\newcommand*{\autoindex}[1]{% 
  \index{#1\ifcodeline@index\encapchar usage\fi}%
}

\ntt To avoid font substitution warnings we make the tt font always print in the normal weight and shape.
\newcommand{\ntt}{\normalfont	tfamily}

\indexcs Index a control sequence without printing it. Note non-long. The @nobslash strips off an optional leading backslash before passing the control sequence name to \indexcs. This means that \indexcs{cs} and \indexcs{cs} produce the same index entry.
\newcommand*{\indexcs}[1]{% 
  \@xp\@xp\@xp\@indexcs\@xp\@nobslash\string#1@nil
}
\@indexcs
Given cs as an argument, this writes something like cs@\verb"*+\cs+ to the .idx file (or cs=\verb!*+\cs+ if using doc.sty).

\@boxorbreak
Start up for a \cs or \cn command, adds an \hbox if in math, or an allowbreak penalty if the preceding item is not a space. (In case two such commands are used side-by-side.)

\@bothoftwo
This has the effect of removing spaces before each of the arguments. In particular, it removes the space generated by \string\ before the argument.

Control sequence. The function \addbslash makes this command also usable for some special control sequences like \% \} \{: instead of writing \cs{%} which doesn’t work, you can write \cs{\%}.

\DeclareRobustCommand{\cs}[1]{%
\@boxorbreak% 
\ntt 
\addbslash#1\@empty
\@xp\@xp\@xp\@indexcs\@xp\@nobslash\string#1\@nil
}%

Allow distinguishing non-private ‘command names’ that will be visible to the user from internal (mostly private) ‘control sequences’.

\let\cn\cs

\protect{\embrace}

\DeclareTextSymbol{\lbracechar}{OT1}{123}
\DeclareTextSymbolDefault{\lbracechar}{OT1}
\DeclareTextSymbol{\rbracechar}{OT1}{125}
\DeclareTextSymbolDefault{\rbracechar}{OT1}

\providecommand{\embrace}[1]{%
\begingroup \ntt\lbracechar#1\rbracechar\endgroup}

One mandatory argument: cnm; two: cnmm; one optional and one mandatory: cnom; throwing in a star: cnsom; and so on.

\providecommand{\cnbreak}{\penalty999\hskip0pt\relax}
\providecommand{\cnm}[2]{\cn{#1}\cnbreak\embrace{#2}}
\providecommand{\cnmm}[3]{\cn{#1}\cnbreak\embrace{#2}\cnbreak\embrace{#3}}
\providecommand{\cnom}[1]{\cn{#1}\cnbreak\ommitude}
\providecommand{\ommitude}[2]{{\ntt[#1]}\cnbreak\embrace{#2}}
\providecommand{\cnmsm}[4]{\cn{#1}\cnbreak\embrace{#2}\cnbreak\*\embrace{#4}}

The following items should not normally appear in math mode so they don’t need to call \@boxorbreak.

\LaTeX document class name.
\DeclareRobustCommand{\cls}{\category@index{class}}

\LaTeX package name.
\DeclareRobustCommand{\pkg}{\category@index{package}}

\LaTeX option name.
\DeclareRobustCommand{\opt}{\category@index{option}}

Environment name.
\DeclareRobustCommand{\env}[1]{\category@index{environment}}

File name.
\DeclareRobustCommand{\fn}{\category@index{}}
Bib\TeX{} style.
\begin{verbatim}
\DeclareRobustCommand{\bst}{\category@index{\string\BibTeX{} style}}
\DeclareRobustCommand{\cnt}{\category@index{counter}}
\DeclareRobustCommand{\fnt}{\category@index{font}}
\end{verbatim}

With long command names or file names we sometimes prefer to allow hyphenation in the tt font (in combination with suitable \texttt{\hyphenation} statements for individual documents). To make this work we must turn off the feature of Bi\TeX{} that disables the hyphenchar of the tt fonts.

The method shown here depends on the assumption that OT1 encoding will be used for the tt fonts. An encoding-independent method would be more awkward: You’d have to explicitly load the relevant fonts, let’s say by using \texttt{\AtBeginDocument}, and undo the hyphenchar change individually for each font.

Instead we force loading, or possibly reloading (depending on the preload options used locally for creating the Bi\TeX{} format file), of the OT1/cm\texttt{tt} fd file, and then clear the macro \texttt{\O T1+cmtt} which contains code to execute whenever a font of this family is first loaded. The default value is to turn off the hyphenchar, and that’s what we don’t want.

This method is not especially palatable but other methods that don’t involve loading the fd file are significantly less reliable.
\begin{verbatim}
\def\allowtthyphens{\begingroup
\fontencoding{OT1}\fontfamily{cmtt}\
\texttt{Undefine the csname that \texttt{\try@load@fontshape} tests to determine whether the fd file needs loading. Then call \texttt{\try@load@fontshape}. Then we can remove the ‘turn off hyphenation’ code, which as it happens resides in the same csname that was tested.}}
\endgroup
\end{verbatim}

We allow some slop at the right margin because we have some long control sequence names and verbatim text to deal with. Also ignore underfull hboxs and vboxs unless they are really bad.
\begin{verbatim}
\hfuzz2pc
\vbadness9999 \hbadness5000
\def\AmS{{\protect\usefont{OMS}{cmsy}{m}{n}A\kern-.1667em\lower.5ex\hbox{M}\kern-.125emS}}
\def\latex/{{\protect\LaTeX}}
\def\amslatex/{{\protect\AmS-\protect\LaTeX}}
\def\tex/{{\protect\TeX}}
\def\amstex/{{\protect\AmS-\protect\TeX}}
\def\bibtex/{{\protect\Bib-\protect\TeX}}
\makeindex command is already used for other purposes.
\def\makeindx/{MakeIndex}
\end{verbatim}
Don't allow a break after the hyphen:
\def\xypic/{XY\mbox{-}pic}
\newcommand{\Textures}{\textit{Textures}}

‘Meta’ macro.
\def<#1>{\textit{$\langle$#1\rangle}}

Reduce itemsep in lists.
\def\@listi{\leftmargin\leftmargini
\topsep 3\p@ \@plus2\p@ \@minus\p@ \parsep \z@skip \itemsep\z@skip}
\let\@listI\@listi
\def\@listii{\leftmargin\leftmarginii
\labelwidth\leftmarginii \advance\labelwidth-\labelsep
\topsep\z@skip \parsep\z@skip \itemsep\z@skip}
\def\@listiii{\leftmargin\leftmarginiii
\labelwidth\leftmarginiii \advance\labelwidth-\labelsep
\topsep\z@skip \parsep\z@skip \itemsep\z@skip}

An environment to encapsulate remarks relevant to old versions but not essential for the current version.
\newenvironment{histnote}{\begin{trivlist}\item[\hspace{\labelsep}\bfseries Historical Note:]%}{\end{trivlist}}

Turn off \autoindex during \tableofcontents or similar.
\def\@starttoc#1{\begingroup
\let\autoindex\@gobble
\makeatletter
\@input{\jobname.#1}
\if@filesw
\expandafter\newwrite\csname tf@#1\endcsname\immediate\openout\csname tf@#1\endcsname\jobname.#1\relax
\global\@nobreakfalse\endgroup}

Make glossary commands a no-op for the moment. [mjd,1994/10/03] Provide a \secref command for section references.
\newcommand*{\gloss}{\textit{gloss}}
\newcommand*{\secref}{\S\ref{#1}}
We can write `\qc{\%}` to quote a single character in situations where `\verb\"\%\"` would not work, mainly when text is read as a macro argument (e.g., footnotes).

```
\newcommand{\qc}{\ifx\protect\csname qc \endcsname\protect\expandafter\noexpand#1\fi}
```

For this function the first argument is `\protect` and just needs to be discarded. The method for removing a leading backslash is to turn off `\escapechar`; this is more forgiving of variations like `\qc{$}`. If the argument is `\ ` we print a `\cmtt` visible-space character, `␣`.

```
\edef\qc#1{\noexpand\protect\expandafter\noexpand\csname qc \endcsname \noexpand\protect#1}
```

Declare a few character names to avoid e.g., indexing difficulties.

```
\DeclareRobustCommand{\qcat}{\qc\@}
\DeclareRobustCommand{\qcamp}{\qc\&}
\DeclareRobustCommand{\qcbang}{\qc\!}
```

\arg Change `\arg` to print a macro argument number:

```
\DeclareRobustCommand{\arg}{\protect#1\switchcontext{\ntt}}
```

We need to emulate the `amsthm \qedsymbol` for the **A**MS-**T**eX user’s guide.

```
\newcommand{\openbox}{\hbox to.77778em{\hfil\vrule\vbox to.675em{\hrule width.6em\vfil\hrule}\vrule\hfil}}
```

```
\newcommand{\qedsymbol}{\openbox}
```

Logical markup for e-mail address:

```
\def\mail{\texttt}
```

Shorthand for indexing:

```
\def\#1{\let\tempa\@gobble\cn{#1}}
```

Non-indexed `\cn` (maybe call this `\cn*`)?

```
\def\ncn#1{{\let\index\@gobble\cn{#1}}}
```

Indexing difficulties with `!`, `@`.

```
\DeclareRobustCommand{\cnbang}{\ncn{!}\index{!@{\ntt\bslchar\qcbang}}}
\DeclareRobustCommand{\cnat}{\ncn{!}\index{@@{\ntt\bslchar\qcat}}}
```

```
\ifx\tempa\tempb\expandafter\index\else\let\index\@gobble\fi
```

```
\DeclareRobustCommand{\cnbang}{\ncn{!}\index{!@{\ntt\bslchar\qcbang}}}
\DeclareRobustCommand{\cnat}{\ncn{!}\index{@@{\ntt\bslchar\qcat}}}
```

```
\def\#1{\let\tempa\@gobble\cn{#1}}
```

```
\def\ncn#1{{\let\index\@gobble\cn{#1}}}
```

Indexing difficulties with `!`, `@`.
The following section deals with book commands (part, chapter, frontmatter, ...).

Modifications of sectioning commands from book.cls, mostly reducing font sizes and vertical spacing.

\renewcommand\frontmatter{\clearpage
\@mainmatterfalse\pagenumbering{roman}}
\renewcommand\mainmatter{\clearpage
\@mainmattertrue\pagenumbering{arabic}}
\renewcommand\backmatter{\clearpage \@mainmatterfalse}
\renewcommand\part{\clearpage
  \thispagemode{plain}\
  \if@twocolumn  
  \onecolumn
Add Donald Arseneau’s \@removefromreset; used to decouple the footnote counter from \chapter, since chapters here do not automatically start on a new page. [bnb, 1999/09/27]

\@removefromreset{FOO}{BAR} : Removes counter FOO from the list of counters \c@BAR to be reset when counter BAR is stepped. The opposite of \addtoreset.

\def\@removefromreset#1#2{\let\@tempb\@elt\expandafter\let\expandafter\@tempa\csname c@#1\endcsname\def\@elt##1{\expandafter\ifx\csname c@##1\endcsname\@tempa\else\noexpand\@elt{##1}\fi}
5 amsdtex style modifications for sectioning commands

These definitions for \maketitle are from article.cls.

\begin{verbatim}
\renewcommand\maketitle{\par
\renewcommand\thefootnote{\fnsymbol{footnote}}%
\def\makefntext{\hbox to 0cm{\hss\fnsymbol{\thefnmark}}}%
\long\def\makefntext##1{\parindent 1em
\hbox to 1.8em{\hss\fnsymbol{\thefnmark}}##1}
\if@twocolumn
\ifnum \col@number=\@ne
\maketitle
\else
\twocolumn[\maketitle]
\fi
\fi
\else
\newpage
\maketitle
\fi
\end{verbatim}
AMS-TEX STYLE MODIFICATIONS FOR SECTIONING COMMANDS

\def\@maketitle{
  \null
  \vskip 2em
  \begin{center}
    \LARGE \@title \par
    \vskip 1.5em
    \large
    \lineskip .5em
    \begin{tabular}[t]{c}
      \@author
    \end{tabular}
    \par
    \vskip 1em
    \@date
  \end{center}
}

Put the title into both running heads.

\uppercase\expandafter{{{\expandafter\toks@\expandafter{\@title}}}}
\edef\@tempa{\noexpand\markboth{\the\toks@}{\the\toks@}}
\@tempa
\vskip 1.5em}

\renewcommand\tableofcontents{
  \if@twocolumn
    \@restonecoltrue\onecolumn
  \else
    \@restonecolfalse
  \fi
  \subsection*{\contentsname}
  \@starttoc{toc}
  \if@restonecol\twocolumn\fi
}

Edit the sectioning commands.

\renewcommand\section{
  \@startsection {section}{1}{\z@}{-.6\baselineskip\@plus-.3\p@}{.4\baselineskip}
    \reset@font\Large\bfseries}
\renewcommand\subsection{
  \@startsection{subsection}{2}{\z@}{-.3\baselineskip\@plus-.2\p@}{.2\baselineskip}
    \reset@font\normalsize\bfseries}
\renewcommand\subsubsection{
  \@startsection{subsubsection}{3}{\z@}{-.2\baselineskip}{.1\baselineskip}
    \reset@font\normalsize\bfseries}

Edit the table of contents.

\renewcommand\tableofcontents{
  \if@twocolumn
    \@restonecoltrue\onecolumn
  \else
    \@restonecolfalse
  \fi
  \subsection*{\contentsname}
  \@starttoc{toc}
  \if@restonecol\twocolumn\fi
}

AMS-TEX

AMS-TEX

AMS-TEX

AMS-TEX

AMS-TEX

AMS-TEX

AMS-TEX

AMS-TEX
Change index environment to turn off \autoindex.
\renewenvironment{theindex}{\if@twocolumn \@restonecolfalse \else \@restonecoltrue \fi \columnseprule \z@ \columnsep 35\p@ \let\autoindex\@gobble \twocolumn[\section*{\indexname}]\@makeschapterhead{\indexname} \addcontentsline{toc}{chapter}{\indexname} \@mkboth{\uppercase{\indexname}}{\uppercase{\indexname}} \thispagestyle{plain} \parindent\z@ \parskip\z@ \@plus .3\p@\relax \let\item@\@idxitem \if@restonecol\onecolumn\else\clearpage\fi}{\if@twocolumn\twocolumn\else\fi}

Take out \thechapter from \thesection.
\renewcommand{\thesection}{\arabic{section}}
Change the style of captions slightly. Also incorporate some caption improvements from Donald Arseneau (comp.text.tex, 11 Oct 1994).
\long\def\@makecaption#1#2{% \addvspace\abovecaptionskip \begingroup \countdef\@parcycles=8 \global\@parcycles\z@ \@setpar\advance\@parcycles\@ne \ifnum\@parcycles>999 \@@par\@parcycles\z@\fi \ifhmode\unskip\hskip\parfillskip\penalty-\@M\fi\vadjust{\penalty\m@ne}#2\endgroup\ifhmode\unpenalty\fi\par\ifnum\lastpenalty=\m@ne % only one line in the caption \unskip\@skip\ifvmode\@parfillskip\penalty-\@M\fi\% \relax\@parfillskip\unskip\@parfillskip\penalty-\@M\fi\% \hbox to\hsize{\hfill\unhbox\@tempboxa\unskip\hfill} \fi \nobreak\vskip\belowcaptionskip}

For table captions, assume top captions and so put space below the caption rather than above:
\renewenvironment{table}{\belowcaptionskip\abovecaptionskip \abovecaptionskip\z@skip \float{table}}{% \belowcaptionskip\abovecaptionskip \abovecaptionskip\z@skip\% \end\float
6. FLOAT PLACEMENT PARAMETERS

These control the placing of floating objects like tables and figures. The values here, which are much more tolerant than the \LaTeX defaults, are more or less copied from amsclass.dtx.

\setcounter{topnumber}{4}\setcounter{bottomnumber}{4}
\setcounter{totalnumber}{4}\setcounter{dbltopnumber}{4}
\renewcommand{\topfraction}{.97}\renewcommand{\bottomfraction}{.97}
\renewcommand{\textfraction}{.03}\renewcommand{\floatpagefraction}{.9}
\renewcommand{\dbltopfraction}{.97}
\renewcommand{\dblfloatpagefraction}{.9}
\setlength{\floatsep}{8pt plus6pt}
\setlength{\textfloatsep}{10pt plus8pt}
\setlength{\intextsep}{8pt plus6pt}
\setlength{\dblfloatsep}{8pt plus6pt}
\setlength{\dbltextfloatsep}{10pt plus8pt}
\setlength{\@fptop}{0pt}\setlength{\@fpsep}{8pt}\
\setlength{\@fpbot}{0pt plus 1fil}
\setlength{\@dblfptop}{0pt}\setlength{\@dblfpsep}{8pt}\
\setlength{\@dblfpbot}{0pt plus 1fil}
\pagestyle{headings}

Make |...| shorthand for verbatim fragments. In the case of the amsldoc class, we avoid requiring an extra package (doc or shortvrb), to reduce the possibility of package files not being found at run time.

\begin{code}
\verb|
\AtBeginDocument{\catcode'|=\active} \let\activevert=|\gdef|\do\{|\do|\name|\|\$$$\AtBeginDocument{\catcode'|=\active}
\end{code}

\raggedbottom
If the column-specs arg of array or tabular contains a vert bar character, and we have made vert bars active, it will cause trouble. The following command, used in the ctab environment, prevents the trouble.

\newcommand{\arrayargpatch}{% 
  \let@oldarray@array
  \edef\array[#1][#2]{{\catcode'}=\active \gdef{}{\protect\activevert}{}}}

\arrayargpatch
ctab  An environment for centered tables.

Load doc package, reset \AltMacroFont to be the same as \MacroFont
(when there are large sections of conditional code I think it looks better not
to have it all slanted).

\begin{tabular} %
\end{tabular} %
\end{trivlist}

\SpecialMainEnvIndex Override doc.sty's main environment indexing to get rid of the parens around
"environment", for compatibility with our \env command.

\SpecialEnvIndex
Ordinary \DocInput doesn’t handle standardized file headers unless you enclose them in \iffalse ... \fi which I don’t care to do. So instead here’s an alternate version of \DocInput, called \hDocInput.

Define active @ which should be the first non-percent, non-equal-sign character when a file header is present. (If a file header is not present, \hDocInput should not be used.)
7 Hyphenation exceptions

8 Index exceptions

A bunch of stuff we don’t want in code indexes:
The usual \endinput to ensure that random garbage at the end of the file doesn't get copied by docstrip.

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

| Symbols | \dbleqsep | \@mkboth | \@nobslash | \@oddfoot | \@oddhead | \@oldarray | \@part | \@plus | \@removefromreset | \@sanitize | \@schapter | \@setpar | \@topnewpage | \@topnum | \^ | \
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>177</td>
<td>\dbleqsep</td>
<td>465</td>
<td>@mkboth</td>
<td>324</td>
<td>@nobslash</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>5</td>
<td>\dbleqtop</td>
<td>465</td>
<td>@nobslash</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp;</td>
<td>26, 175</td>
<td>@endpart</td>
<td>250, 256, 257</td>
<td>@oddfoot</td>
<td>321</td>
<td>@oddhead</td>
<td>323</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>188</td>
<td>@evenfoot</td>
<td>321</td>
<td>@oddhead</td>
<td>323</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>,</td>
<td>25</td>
<td>@evenhead</td>
<td>322</td>
<td>@oldarray</td>
<td>478, 481</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>25</td>
<td>@firstofone</td>
<td>16</td>
<td>@parcycles</td>
<td>425-428</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>25</td>
<td>@float</td>
<td>442</td>
<td>@part</td>
<td>232, 233</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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