# The mdframed package

Examples for framemethod=default

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In this document I collect various examples for framemethod=default. Some presented examples are more or less exorbitant.

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# 1 Loading

In the preamble only the package mdframed width the option framemethod=default is loaded. All other modifications will be done by \mdfdefinestyle or \mdfsetup.

#### Note

Every \global inside the examples is necessary to work with the package showexpl.

# 2 Examples

All examples have the following settings:

```
\mdfsetup{skipabove=\topskip,skipbelow=\topskip}
\newrobustcmd\ExampleText{%

An \textit{inhomogeneous linear} differential equation
has the form
\begin{align}
L[v] = f,
\end{align}
where $L$ is a linear differential operator, $v$ is
the dependent variable, and $f$ is a given non-zero
function of the independent variables alone.
}
```

#### Example 1 – Package listings

The example below is inspired by the following post on StackExchange Background overflows when using rounded corners for listings (package: 'listings')

Here the solution which can be decorate as usual.

```
\label{eq:beginEnvironment} $$ \BeforeBeginEnvironment{lstlisting}{\%$ $$ \begin{mdframed}[<modification>]\%$ $$ \vspace{-0.7em}} $$ \AfterEndEnvironment{lstlisting}{\%$ $$ \vspace{-0.5em}\%$ $$ \end{mdframed}$$}
```

With the new command \surroundwithmdframed you can use

```
\slash \
```

### Example 2 - Package multicol

How I wrote in "Known Problems" you can't combine multicol with mdframed. In a simple way without any breaks you can use:

```
\begin{multicols}{2}
\lipsum[1]
\begin{mdframed}
\ExampleText
\end{mdframed}
\lipsum[2]
\end{multicols}
```

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An  $inhomogeneous\ linear$  differential equation has the form

$$L[v] = f, (1)$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.

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### Example 3 - Working in twocolumn mode

```
\twocolumn[%
\Examplesec{Working in
twocolumn mode}]
\lipsum[1]\lipsum[2]
\begin{mdframed}[%
leftmargin=10pt,%
rightmargin=10pt,%
linecolor=red,
backgroundcolor=yellow]
\ExampleText
\end{mdframed}
\lipsum[2]
```

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An *inhomogeneous linear* differential equation has the form

$$L[v] = f, (2)$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.

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### Example 4 - Working inside enumerate

```
Text Text Text Text Text Text Text

| begin{enumerate}
| item in the following \ldots
| begin{mdframed}[linecolor=blue,linewidth=2]
| ExampleText
| end{mdframed}

| item \lipsum[2]
| end{enumerate}

Text Text Text Text Text Text Text
```

Text Text Text Text Text Text Text Text

1. in the following ...

An inhomogeneous linear differential equation has the form

$$L[v] = f, (3)$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.

2. Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Text Text Text Text Text Text