

# The mdfamed 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 `mdfamed` with 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.

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

With the new command `\surroundwithmdframed` you can use

```
\surroundwithmdframed{listings}
```

## 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

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

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

```

\documentclass[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

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

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

1. in the following ...

An *inhomogeneous linear* differential equation has the form

$$L[v] = f, \tag{3}$$

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.

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Text Text Text Text Text Text