

Part II

Listing

Warning: To reproduce the listings in a L^AT_EX document, use the same formatting instructions as those of the documentation portion of `oops.dtx` (such as `\documentclass`, `\usepackage`, and `\newtcblisting`), and remove any `^^A`. Any deviation from the original may require tinkering.¹

Listing 1.

```
% \OpsOption{
% Inner={\char`{####1\char`}},
% ^^A% spaces betw. inner and outer brackets matter!->
% Separ={\ \char`@ \ }{\ \ }{\ \char`@ \ },
% Outer={\char`^####1\$}}
% \Ops<Test>{ X = x, Y = y, Z = z }*
% \tab \X<Test>\Y<Test>\Z<Test>\
% \Ops<Test>i{(#1)}{ X = x, Y = y, Z = z }*
% \tab \X<Test>\Y<Test>\Z<Test>\
% \Ops<Test>{ X = x, Y = y, Z = z }*s{\ \&\ }{\ \ }{\ \&\ }}
% \tab \X<Test>\Y<Test>\Z<Test>\
% \OpsOption{ Write = \BooleanTrue }
% \Ops<Test>{ X = x, Y = y, Z = z }*o{\char`[#1\char`]}
% \tab \X<Test>\Y<Test>\Z<Test>\
% \OpsClear<Test>
% \OpsOption{ Write = \BooleanFalse }
%
```

$\hat{x}\% \{y\} @ \{z\}\$$	$\{x\}\{y\}\{z\}$
$\hat{(x)}\% (y) @ (z)\$$	$(x)(y)(z)$
$\hat{\{x\}, \{y\} \& \{z\}\$$	$\{x\}\{y\}\{z\}$
$[\{x\}\% \{y\} @ \{z\}]$	$\{x\}\{y\}\{z\}$

Listing 2.

```
% \OpsRead \tab \X<Test>\Y<Test>\Z<Test>
% \OpsClear<Test>
%
```

 $\{x\}\{y\}\{z\}$

Listing 3.

```
% \Ops[We call~]{Elems={\omega_1, \dots, \omega_n}}*
% [~the elementary events, and ]{Space=\Omega}
% [\begin{equation*}\Space=(\Elems)\end{equation*}~the sample space.]
```

¹For instance, in testing v1.1, I realized `\usepackage[T1]{fontenc}` was needed, to work with `\documentclass{article}` in place of `\documentclass[full]{l3doc}`, hence added it to the documentation portion of `oops.dtx`

```
% {}
% \OpsClear
%
```

We call $\omega_1, \dots, \omega_n$ the elementary events, and

$$\Omega = (\omega_1, \dots, \omega_n)$$

the sample space.

Listing 4.

```
% \OpsOption{ Write = \BooleanTrue }
% \Ops[Let ]
% {Space=\Omega, SigmaField=\mathcal{F}, Measure=\mathcal{P}}
% *s{{,},{,},{,}}o{\ensuremath{\{\#1\}}}
% [~denote the probability space, where $\SigmaField\subset
2^{\Space}$.]
% {}
% \OpsClear
% \OpsOption{ Write = \BooleanFalse }
%
```

Let $\{\Omega, \mathcal{F}, \mathcal{P}\}$ denote the probability space, where $\mathcal{F} \subset 2^\Omega$.

Listing 5.

```
% \OpsRead \tab $\Omega$ $\SigmaField$ $\Measure$
% \OpsClear
%
```

$$\Omega \mathcal{F} \mathcal{P}$$

Listing 6.

```
% \OpsOption{ Write = \BooleanTrue }
% \newtheorem{theorem}{Theorem}
% \Ops i{\mathbb{\#1}}
% { N = { N } , R = { R }, Grad = { \operatorname{grad} } }
% [\begin{theorem}
% [Mittelwertsatz f\"ur $n$ Variable]Es~sei~
% { OffMenge = {D}, Ci = {C^{\#1}}, Strecke = {[x_0,x]} }
% [$n\in\mathbb{N}$,~$\text{OffMenge}\subseteq\mathbb{N}^n$ eine offene Menge und
% $f\in\text{Ci}(\text{OffMenge},\mathbb{R})$.
% Dann gibt es auf jeder Strecke $\text{Strecke}\subseteq\text{OffMenge}$ einen
% Punkt $\xi\in\text{Strecke}$,~]
% { yD = { f(x)-f(x_0) }, xD = { x-x_0 }, Steig = { \frac{yD}{xD} } }
% } }
% [so dass gilt
% \begin{equation*}
```