Politechnika Warszawska

WYDZIAŁ MATEMATYKI
I NAUK INFORMACYJNYCH

Praca dyplomowa licencjacka

na kierunku Matematyka

NAJPIERW WYGENERUJ STRONĘ TYTUŁOWĄ

KTÓRA ZNAJDUJE SIĘ

Numer albumu 000000

promotor

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konsultacje

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WARSZAWA 2018

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Abstract

ENGLISH TITLE

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Keywords: keyword1, keyword2, ...

Streszczenie

POLISH TITLE

Streszczam.

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Słowa kluczowe: slowo1, slowo2, ...

Warsaw, ...

Declaration

I hereby declare that the thesis entitled „ENGLISH TITLE", submitted for the Master degree, supervised by dr inż. Promotor X, is entirely my original work apart from the recognized reference.

.....

Contents

Introduction

What is the thesis about? What is the content of it? What is the Author's contribution in it?

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1. Example chapter

This TEX file is to be compiled with pdfLaTeX (it's just quick build in TeXMaker).

1.1. Example section

Definition 1.1 (Definition). A *definition* is a statement of the meaning of a term (a word, phrase, or other set of symbols).

1.1.1. Example subsection

It's the deepest deph of sectioning allowed by rector.

Definition 1.2 (Equation). In mathematics, an *equation* is a statement of an equality containing one or more variables.

Example 1.3. This is an example of an equation:

$$2 + 2 = 4. \tag{1.1}$$

Equation without a number:

$$2 + 2 = 4,$$

or:

$$2 + 2 = 4.$$

Equation (1.2) jest false. References (and some other things) work properly after compliling TEX file twice.

$$\int_0^1 x \, dx = \frac{3}{2}. \tag{1.2}$$

Theorem 1.4 is a very interensting result.

Theorem 1.4 (Pythagoras' Theorem). Let c represent the length of the hypotenuse and a and b the lengths of the triangle's other two sides. Then:

$$a^2 + b^2 = c^2.$$

Proof. The proof has been presented in [1] and [2]. We can write then [1, 2]. □

Corollary 1.5. The use of the term *corollary*, rather than *proposition* or *theorem*, is intrinsically subjective.

Remark 1.6. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumyeirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diamvoluptua. At vero eos et accusam et justo duo dolores et ea rebum.

Lemma 1.7 (Someone's Lemma). Ten lemat jest nie na temat.

Proof. Dowód przez indukcję. □

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1.2. Floats – tables and figures

Place labels after captions or you get the wrong labelling.

In Table 1.1 there are additional options for `table` and `figure` environments.

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Table 1.1: Additional options

symbol	effect
`h`	Place the float here, i.e., approximately at the same point it occurs in the source text (however, not exactly at the spot)
`t`	Position at the top of the page
`b`	Position at the bottom of the page
`p`	Put on a special page for floats only
`!`	Override internal parameters LaTeX uses for determining "good" float positions
`H`	Places the float at precisely the location in the LaTeX code. Requires the float package,[1] i.e., `\usepackage{float}`. This is somewhat equivalent to !ht.

Figure 1.1: Example figure – it has been drawn by LaTeX default tools

2. The next chapter

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2.1. Matrices

Prosta macierz:

$$\begin{matrix} a & b & c & d \\ d & e & f & g \\ 1 & 1 & 1 & 1 \end{matrix}$$

Macierz z nawiasami okrągłymi:

$$A = \begin{pmatrix} a & b & c & d \\ d & e & f & g \\ 1 & 1 & 1 & 1 \end{pmatrix}$$

Macierz z nawiasami kwadratowymi:

$$\begin{bmatrix} a & b & c & d \\ d & e & f & g \\ 1 & 1 & 1 & 1 \end{bmatrix}$$

Można też ogólniejsze środowisko:

$$\begin{matrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{matrix}$$

Nawiasy klamrowe:

$$\left\{ \begin{array}{ccc} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{array} \right\}$$

Definition 2.1. Niech $A \neq \emptyset$, $n \in \mathbb{N}$. Każde przekształcenie $f : A^n \to A$ nazywamy *n-arną operacją* lub *działaniem* określonym na A. 0-arne operacje to wyróżnione stałe.

Definition 2.2 (Algebra). Parę uporządkowaną (A, F), gdzie $A \neq \emptyset$ jest zbiorem, a F jest rodziną operacji określonych na A, nazywamy *algebrą* (lub *F-algebrą*). Zbiór A nazywa się *zbiorem elementów*, *nośnikiem* lub *uniwersum* algebry (A, F), a F *zbiorem operacji elementarnych.*

Proposition 2.3. Stwierdzam więc ostatnio, że doszedłszy do granicy, pozostaje mi tylko przy tej granicy biwakować albo zawrócić, możliwie też szukać przejścia czy wyjścia na nowe obszary.

Bibliography

[1] A. Author, *Title of a book*, Publisher, year, page–page.

[2] J. Bobkowski, S. Dobkowski, Title of an article, *Magazine X, No. 7*, year, PAGE–PAGE.

[3] C. Brink, Power structures, *Algebra Universalis 30(2)*, 1993, 177–216.

[4] F. Burris, H. P. Sankappanavar, *A Course of Universal Algebra*, Springer-Verlag, New York, 1981.

List of symbols and abbreviations

nzw.	nadzwyczajny
*	operator gwiazdka
~	tylda

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List of Figures

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Spis tabel

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List of appendices

1. Appendix 1
2. Appendix 2
3. In case of no appendices, delete this part.