The TEX Book

Don Knuth

November 20, 2013

1 Special characters

Exercise 6. *Prove Fermat's Theorem.* See table 1 on page 1.

1.1 Accents

Name	Exam1	Exam2	Exam3	Grade
John	19	28	33	C
Jane	49	35	60	B
Jim	76	38	59	A

1.2 Braces

R

Fermat's Last Theorem. *For $n \geq 3$, the equation $x^n + y^n = z^n$ has no non-trivial integer solutions.*

Proof. See Wiles. □

The polynomial $p(t)$ splits...

Name	Exam1	Exam2	Exam3	Grade
John	19	28	33	C
Jane	49	35	60	B
Jim	76	38	59	A

Table 1: Math 361 Grades

1.3 Dollar signs

$$\left|\sum_{i=1}^{n}(\quad 's)a_ib_i\right| \le \left(\sum_{i=1}^{n} a_i^2\right)^{1/2} \left(\sum_{i=1}^{n} b_i^2\right)^{1/2}$$

2 Sectioning

123

345

- This is the first item
- This is the second item
- This is the last itme

Some special characters in TeX:[1, 13]

1. Accents
2. Braces
3. Dollar signs

$$\sum_{k=1}^{n} k^2, \frac{a}{q}, \int_1^x \frac{1}{x}dx, \sin(x), \arcsin(x), e^{2\pi i} \tag{1}$$

$$\begin{aligned}(a+b)^3 &= (a+b)^2(a+b)\\ &= (a^2+2ab+b^2)(a+b)\\ &= (a^3+2a^2b+ab^2)+(a^2b+2ab^2+b^3)\\ &= a^3+3a^2b+3ab^2+b^3\end{aligned}$$

3 Conclusion

1d23

References

[1] Henry H. Albert, *Free torsoids*, Current trends in lattice theory. D. Van Nostrand, 1970.

[2] Henry H. Albert, *Free torsoids*, Current trends in lattice theory (G. H. Birnbaum, ed.). vol. 7, D. Van Nostrand, Princeton, January, 1970, no translation available, pp. 173–215 (German).

[3] Soo-Key Foo, *Lattice Constructions*, Ph.D. thesis, University of Winnebago, 1990. 262 Chapter 10 LATEX documents

[4] Soo-Key Foo, *Lattice Constructions*, Ph.D. thesis, University of Winnebago, Winnebago, MN, December 1990, final revision not yet available.

[5] Grant H. Foster, *Computational complexity in lattice theory*, tech. report, Carnegie Mellon University, 1986.

[6] Grant H. Foster, *Computational complexity in lattice theory*, Research Note 128A, Carnegie Mellon University, Pittsburgh, PA, December, 1986, research article in preparation.

[7] Peter Konig, *Composition of functions*. Proceedings of the Conference on Universal Algebra (Kingston, 1969).

[8] Peter Konig, *Composition of functions*. Proceedings of the Conference on Universal Algebra (G. H. Birnbaum, ed.). vol. 7, Canadian Mathematical Society, Queens Univ., Kingston, ON, available from the Montreal office, pp. 1–106 (English).

[9] William A. Landau, *Representations of complete lattices*, Abstract: Notices Amer. Math. Soc. **18**, 937.

[10] William A. Landau, *Representations of complete lattices*, Abstract: Notices Amer. Math. Soc. **18**, 937, December, 1975.

[11] George A. Menuhin, *Universal algebra*. D. Van Nostrand, Princeton, 1968. 10.5 Back matter 263

[12] George A. Menuhin, *Universal algebra*. 2nd ed., University Series in Higher Mathematics, vol. 58, D. Van Nostrand, Princeton, March, 1968 (English), no Russian translation.

[13] Ernest T. Moynahan, *On a problem of M. Stone*, Acta Math. Acad. Sci. Hungar. **8** (1957), 455–460.

[14] Ernest T. Moynahan, *On a problem of M. Stone*, Acta Math. Acad. Sci. Hungar. **8** (1957), 455–460 (English), Russian translation available.