

Example of Bibliography, URL, and Abstract

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October 24, 2010

Abstract

Note that to see [?] replaced by actual numbers [1] you need to typeset the file twice. LaTeX creates an auxillary file the first time, and uses it the second. Read the comented out explanations at the bottom. While the bibliography functions used here are built into LaTeX, you'll need the url package for writing nice web references. A proper web reference includes the author of the webpage, if you can find it. And it includes the date of your last access because web references are mutable and not very long lived.

Marginal notes are very useful during the preparation of a document when there is an editor or co-author who has comments.

Theorem. [1] *For all real numbers x and y ,*

$$|xy| = |x||y|$$

. **Proof.** To prove this¹, first suppose that $x \geq 0$ and $y \geq 0$. Then $xy \geq 0$. By definition[4] of absolute value, $|xy| = xy$, $|x| = x$ and $|y| = y$. Therefore $|xy| = |x||y|$.

Having considered all possible cases[3] for the signs of x and y , we have proved that $|xy| = |x||y|$. q.e.d.

This proof is of importance because it establishes that absolute value commutes with multiplication, a commonly used property of absolute value. The proof[?] illustrates the strategy of dividing a mathematical statement into several cases and proving each case separately.

¹http://new.math.uiuc.edu/this_is@test

References

- [1] F. Apéry. *An algebraic halfway model for the eversion of the sphere*. Tohoku Math. J. **44** (1992). pp. 103-150 with an appendix by Bernard Morin.
- [2] Z.M. Balogh, R. Hofer-Isenegger, and J.T. Tyson. *Lifts of Lipschitz maps and horizontal fractals in the Heisenberg group*, Ergodic Theory Dynam. Systems **26** (2006), 621–651.
http://new.math.uiuc.edu/this_is@another^test
- [3] Z.M. Balogh and J.T. Tyson. *Hausdorff dimensions of self-similar and self-affine fractals in the Heisenberg group*, Proc. London Math. Soc. (3) **91** (2005), no. 1, 153–183
- [4] R. W. Brockett. *Control theory and singular Riemannian geometry*, in “New directions in applied mathematics” (Cleveland, Ohio, 1980), Springer-Verlag, 1982, 11–27.