

The House of Santa Claus

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The abstract should be a quick summary/outline of the talk of roughly four to ten lines. In particular, the main goal of the talk should be stated and how this goal will be achieved. Also, the main source(s) of the seminar talk should be mentioned.

1 Basics

Definition 1.1 (House of Santa Claus). The *House of Santa Claus* is the graph (V, E) , defined as follows:

$$V := \{1, \dots, 5\}$$

$$E := \{\{1, 2\}, \{1, 5\}, \{2, 3\}, \{2, 4\}, \{2, 5\}, \{3, 4\}, \{3, 5\}, \{4, 5\}\}$$

One can illustrate the House of Santa Claus as in Figure 1; more information on *TikZ* can be found in the documentation [3]. General information on \LaTeX can be found in the *\LaTeX* Companion [2].

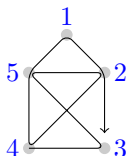


Figure 1: House of Santa Claus

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2 Properties of the House of Santa Claus

Theorem 2.1 (incompleteness theorem). *The House of Santa Claus is not complete.*

Proof. We use the notation from Definition 1.1. The House of Santa Claus is not a complete graph because the edge $\{1, 3\}$ is not contained in the House of Santa Claus. \square

3 Examples

Example 3.1.

- Here is an example
- ... and another one
- ... and another one

Exercise 3.2. Please do not forget to insert a few exercises – so that the participants can test their understanding of the topic.

Example 3.3.

1. An example ...
2. ... using numbers.

References

- [1] C. Löh. Exercises in Academic Writing, 2017.
<https://loeh.app.uni-regensburg.de/seminars/eaw.pdf>
- [2] F. Mittelbach, M. Goossens, J. Braams, D. Carlisle, C. Rowley. *The L^AT_EX Companion*, second edition, Addison-Wesley, 2004.
- [3] T. Tantau. *The TikZ and PGF Packages*,
<http://www.ctan.org/tex-archive/graphics/pgf/base/doc/generic/pgf/pgfmanual.pdf>