

4 SAMPLE ARTICLE BASED ON dmga CLASS

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16 **Abstract**

17 This sample article contains typical elements of article: definitions, the-
18 orems, proofs etc.

19 **Keywords:** Type Keywords of your paper here.

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22 1. INTRODUCTION

23 Here we have some definitions.

24 **Definition** [1]. A graph is said to be *embeddable in the plane* or *planar*, if it can
25 be drawn in the plane so that its edges intersect only at their ends.

26 **Theorem 1.** K_5 is not planar.

27 **Proof.** See [1].

28



Theorem 2 (Eulers's formula). *If G is a connected plane graph, then*

$$v - e + f = 2,$$

where v – number of vertices of G , e – number of edges of G and f – number of faces of G .

Proof of Euler's formula. See [1].

■

Theorem 3 (Kuratowski). *A graph is planar if, and only if it contains no subdivision of K_5 or $K_{3,3}$.*

Proof of Kuratowski's theorem. In the proof we need two lemmatas:

Lemma 4. *Lemma 1.*

Proof of lemma 4. Proof inside other proof is ended with white square.

□

Lemma 5. *Lemma 2.*

Proof of lemma 5. This is a proof for second lemma.

□

Here should be a proper proof.

■

Remark 6. Example of remark. Remarks, examples, notes and problems are displayed with non-italic font, like definitions, but with numbers.

REFERENCES

- [1] J.A. Bondy, U.S.R. Murty, Graph Theory with Applications (North-Holland, NewYork-Amsterdam-Oxford, 1982).
- [2] G. Chartrand, F. Harary and P. Zhang, *On the geodetic number of a graph*, Networks **39** (2002) 1–6.
- [3] R.J. Gould, M.S. Jacobson and J. Lehel, *Potentially G -graphic degree sequences*, in: Combinatorics, Graph Theory, and Algorithms Vol. I, Alavi, Lick and Schwenk (Ed(s)) (New York: Wiley & Sons, Inc., 1999) 387–400.
- [4] K. Ray-Chaudhuri and R.M. Wilson, *Solution of Kirkman's schoolgirl problem*, in: Proc. Symp. Pure Math., S. Motzkin (Ed(s)), Amer. Math. Soc. **19** (Providence, Rhode Island, 1971) 187–204.
<https://doi.org/10.1090/pspum/019/9959>

- 58 [5] P. Sittitrai and K. Nakprasit, *An analogue of DP-coloring for variable de-*
59 *generacy and its applications*, Discuss. Math. Graph Theory (2019), in press.
60 <https://doi.org/10.7151/dmgt.2238>
- 61 [6] E. Cela and E. Gaar, *Monotonic representations of outerplanar graphs as*
62 *edge intersection graphs of paths on a grid* (2019).
63 [arXiv:1908.01981](https://arxiv.org/abs/1908.01981)
- 64 [7] N.J.A. Sloane, *The On-Line Encyclopedia of Integer Sequences* (2021).
65 <https://oeis.org>
- 66 [8] S.K. Ayyaswamy and C. Natarajan, *Hop domination in graphs* (2015),
67 manuscript.
- 68 [9] L. Ponomarenko, *Stochastic integral with respect to the multiparameter Brow-*
69 *nian motion and attached stochastic equations* (1972), in Russian.