

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.

20 **2020 Mathematics Subject Classification:** Type 2020 Mathematics  
21 Subject Classification of your paper here.

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*

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

29 *where  $v$  - number of vertices of  $G$ ,  $e$  - number of edges of  $G$  and  $f$  - number of*  
30 *faces of  $G$ .*

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

32

■

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

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

36 **Lemma 4.** *Lemma 1.*

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

38

□

39 **Lemma 5.** *Lemma 2.*

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

41

□

42 Here should be a proper proof.

43

■

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

46

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