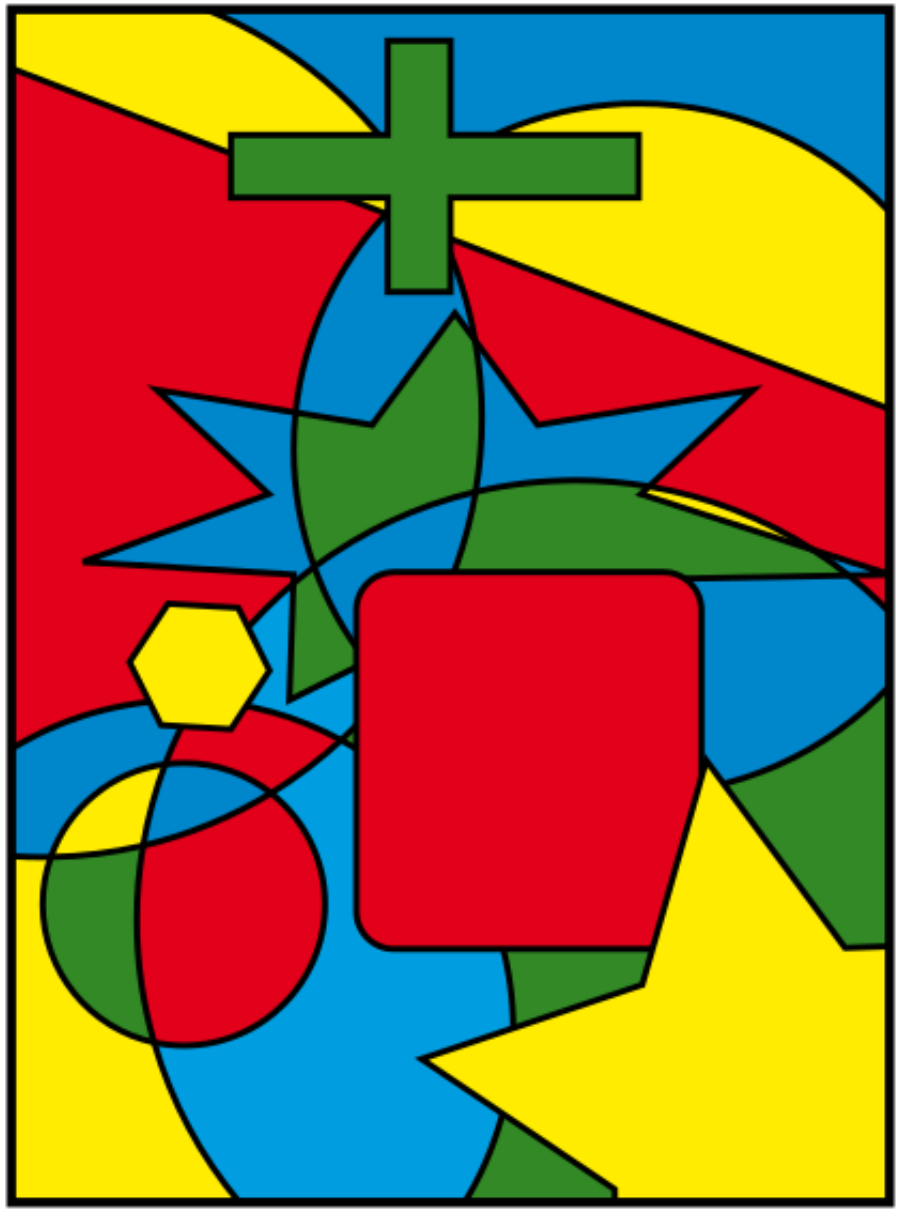
(十一) 图论: 平面图与图着色
(Planarity and Coloring)

魏恒峰

hfwei@nju.edu.cn

2021 年 05 月 20 日



Theorem (Four Color (Map) Theorem (informal))

Every map can be colored with only four colors such that no two adjacent regions share the same color.

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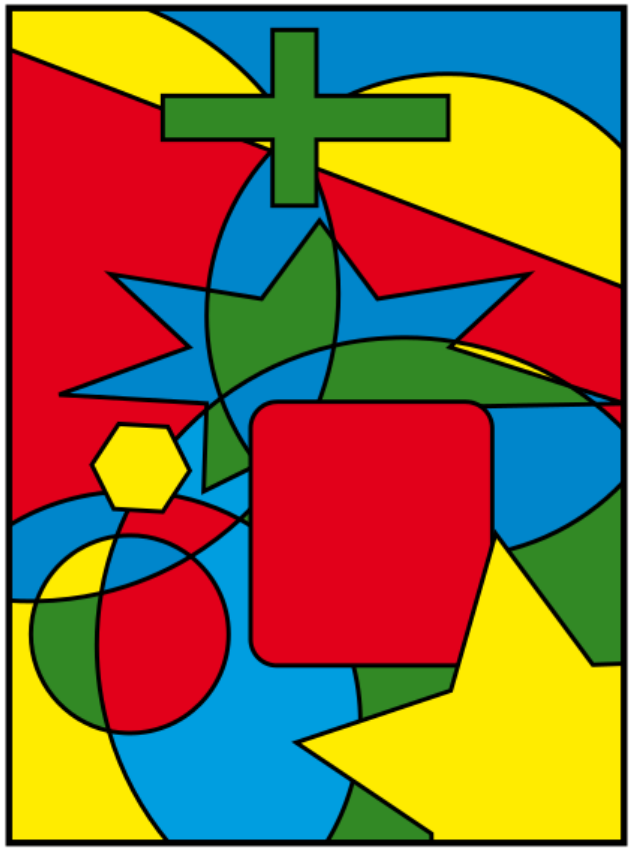

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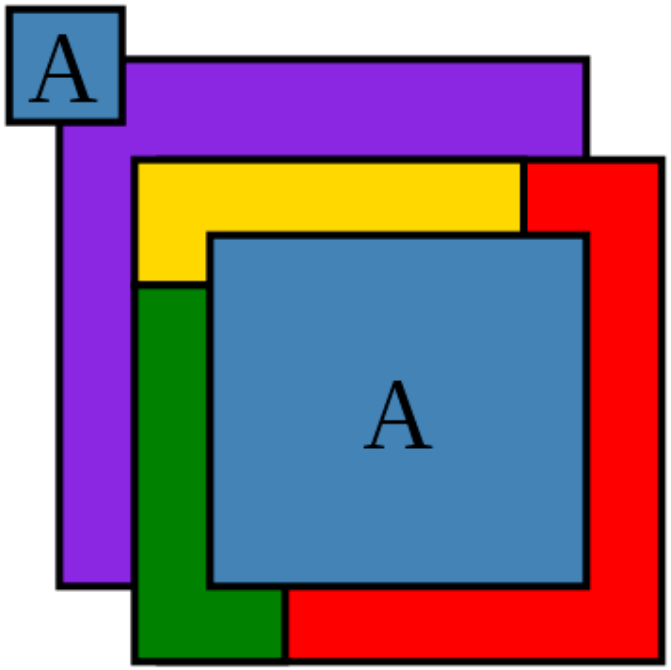

Regions should be contiguous.

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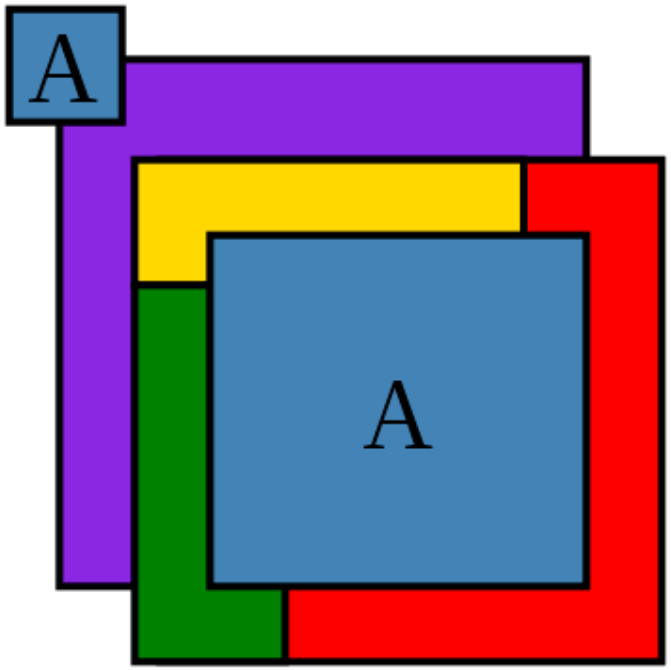

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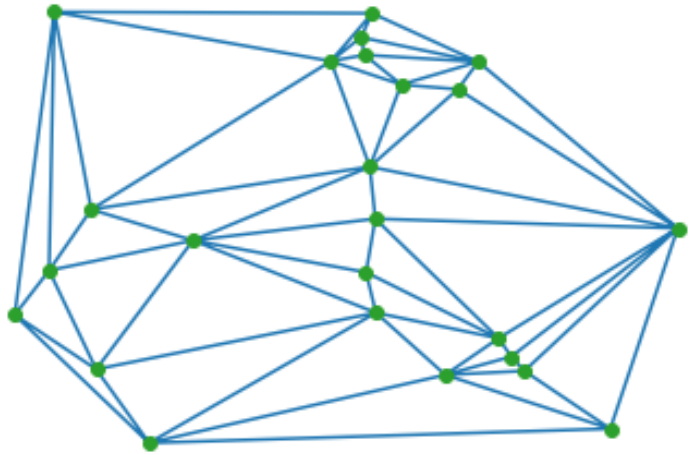

Adjacent regions share a segment.

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What if we have a map in which
every region is adjacent to ≥ 5 other regions?

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What does it to do with GRAPH THEORY?

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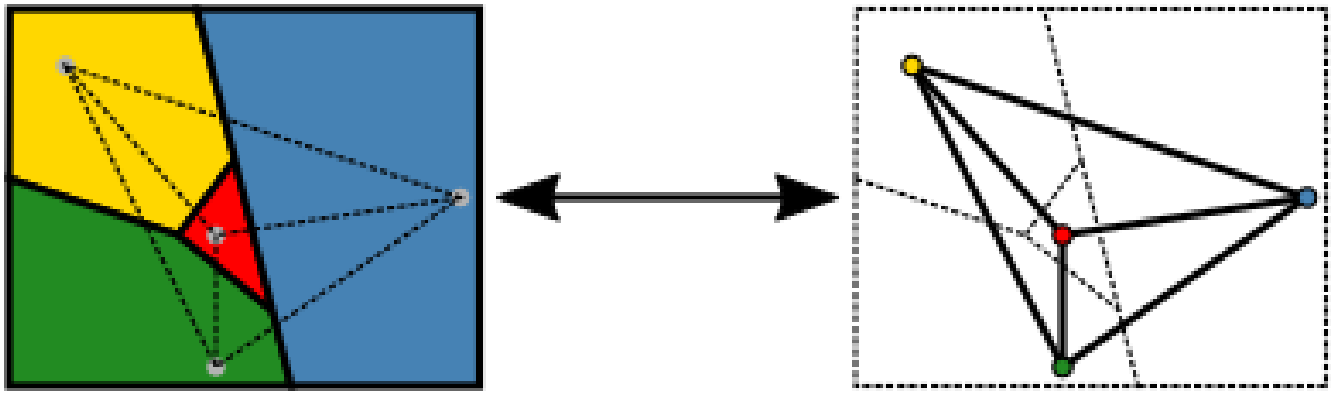

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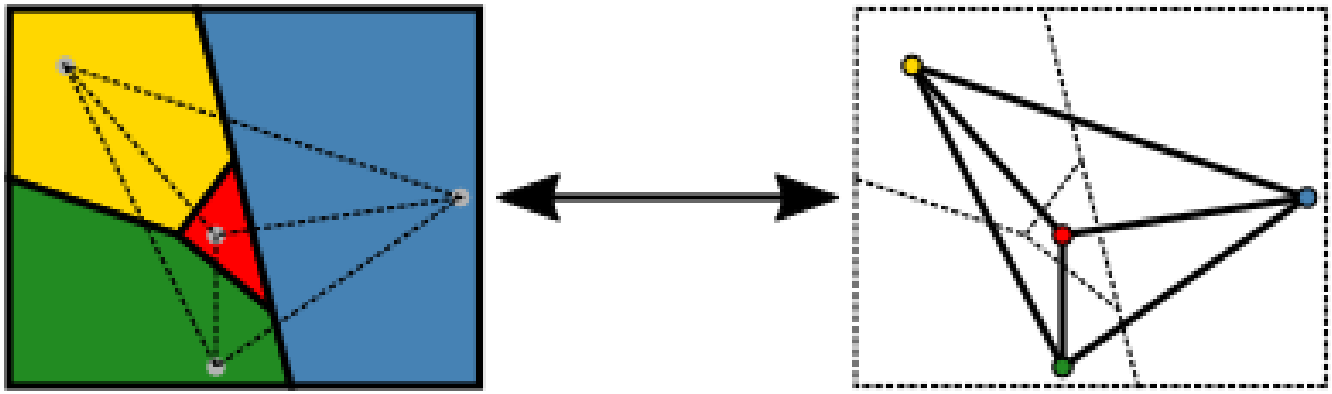
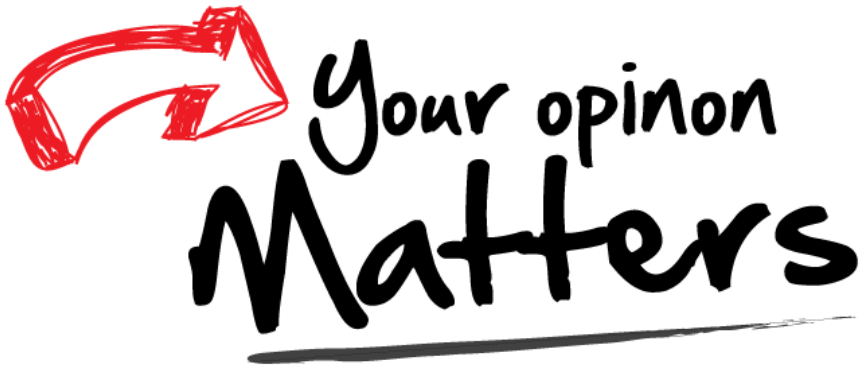


Theorem (Four Color (Map) Theorem)

Every planar graph is four-colorable.


Thank
You!



Office 302

Mailbox: H016

hfwei@nju.edu.cn