

# Coloring graphs with some forbidden or restricted configurations

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Graph coloring is perhaps the most popular topic in graph theory. It is also one of the hardest problem to approximate in an algorithmic sense. Therefore it makes sense to consider some restricted family of graphs. I have been working on this problem for many classes, including

1. graphs with no  $H$ -minor,
2. graphs with no odd  $H$ -minor,
3. graphs with no  $H$ -subdivision,
4. graphs with no  $H$ -immersion, and
5. 3-colorable graphs.

We give several results concerning this class of graphs, but give even more problems and conjectures.