

Classes	Vertex-partitions	References
Planar graphs	$(\mathcal{I}, \mathcal{I}, \mathcal{I}, \mathcal{I})$ $(\mathcal{I}, \mathcal{F}, \mathcal{F})$ $(\mathcal{F}_2, \mathcal{F}_2, \mathcal{F}_2)$ $(\mathcal{F}, \mathcal{D}_2)$ $(\mathcal{I}, \mathcal{D}_3)$	The Four Color Theorem Borodin Poh Thomassen Thomassen
Planar graphs with girth 4	$(\mathcal{I}, \mathcal{I}, \mathcal{I})$ $(\mathcal{F}, \mathcal{F})$ $(\mathcal{F}_5, \mathcal{F})$ $(\mathcal{I}, \mathcal{F})$	Grötzsch Folklore Present paper (Theorem ??) Open question (Question ??)
Planar graphs with girth 5	$(\mathcal{I}, \mathcal{F})$	Borodin and Glebov