

## Collapsible Graphs

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A graph  $G$  is  $k$ -collapsible if  $\delta(G) = k$  and any proper induced subgraph has smaller minimum degree. Collapsible graphs can be viewed as lower extremal graphs for monocore graphs (which have degeneracy equal to their minimum degree). We investigate the structure and basic properties of these graphs. A  $k$ -collapsible graph necessarily has many vertices of degree  $k$ ; we seek sharp bounds on how many it must have. Collapsible graphs also have their own classes of extremal graphs; we consider examples of graphs in these classes.

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