subdivision

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Related topic	Homeomorphic
Related topic	Realization

A graph H is said to be a *subdivision*, or *topological minor* of a graph G, or a *topological G graph* if H is obtained from G by subdividing some of the edges, that is, by replacing the edges by paths having at most their endvertices in common. We often use TG for a topological G graph.

Thus, TG denotes *any* member of a large family of graphs; for example, TC_4 is an arbitrary cycle of length at least 4. For any graph G, the spaces $R(G)$ (denoting the realization of G) and $R(TG)$ are homeomorphic.