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Anisah Nu'Man* (s-anuman1@math.unl.edu), Department of Mathematics, 203 Avery Hall, PO Box 880130, Lincoln, NE 68588-0130. *Tame filling invariants, examples, and closure properties*. Preliminary report.

Filling invariants are quasi-isometry invariants for groups with finite presentations defined using properties of van Kampen diagrams. Intrinsic and extrinsic tame filling functions are a recent pair of asymptotic invariants that are a strengthening of the intrinsic diameter (i.e., isodiametric) function and the extrinsic diameter function. Mihalik and Tschantz defined the related concept of tame combable groups, and Brittenham and Hermiller showed that the existence of a (finite-valued) tame filling function implies that the group is tame combable. Here we give examples of tame filling functions and how they behave under group constructions. (Received August 22, 2014)