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Tom Kelly* (tjkelly@princeton.edu). *Abundance of Graph Statistics.*

We examine how many minimal dominating sets there can be in a graph with domination number γ . We provide an explicit construction and also use probabilistic methods to show the existence of a graph with domination number γ in which almost all sets of size γ dominate. Similarly, we present an explicit construction of a graph with diameter d , where almost all pairs of vertices are at distance d . In general, we ask about the "abundance" of instances in a graph that comprise a graph statistic. (Received September 16, 2014)