1 Graph Theory Primer

Definition 1.1. Let G = (V, E) be a graph, where V is the vertex setand E is the edge set. The **degree** of a vertex $v \in V$ (denoted $\deg(v)$) is the nubmer of edges with one end in v. (i.e. The size of the set $\{va \mid a \in V, \ a \neq v\}$)