Let $V_1, V_2$ be a partition of the vertex set in a graph $G$, and let $\gamma_i$ denote the least number of vertices needed in $G$ to dominate $V_i$. We prove that $\gamma_1+\gamma_2 \leq \frac{4}{5} \mid V(G) \mid$ for any graph without isolated vertices or edges, and that equality occurs precisely if $G$ consists of disjoint 5-paths and edges between their centers. We also give upper and lower bounds on $\gamma_1+\gamma_2$ for graphs with minimum valency $\delta$, and conjecture that $\gamma_1+\gamma_2 \leq \frac{4}{\delta+3} \mid V(G) \mid$ for $\delta \leq 5$. As $\delta$ gets large, however, the largest possible value of $(\gamma_1+\gamma_2)/ \mid V(G) \mid$ is shown to grow with the order of $\frac{\log \delta}{\delta}$.