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Mark L Lewis and **Donald L. White*** (white@math.kent.edu), Department of Mathematical Sciences, Kent State University, Kent, OH 44242. *Four-Vertex Degree Graphs of Nonsolvable Groups.*

For a finite group G , the character degree graph $\Delta(G)$ is the graph whose vertices are the primes dividing the degrees of the ordinary irreducible characters of G , with distinct primes p and q joined by an edge if pq divides some character degree of G . We determine all graphs with four vertices that occur as $\Delta(G)$ for some nonsolvable group G . Along with previously known results on character degree graphs of solvable groups, this completes the classification of all four-vertex graphs that occur as $\Delta(G)$ for some finite group G . (Received July 30, 2012)