

$(r, 2, (r - 3)(r - 1))$ -REGULAR GRAPHS

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Abstract

A graph G is called $(r, 2, (r - 3)(r - 1))$ - regular if each vertex in the graph G is distance one from exactly r vertices and each vertex in the graph G is distance two from exactly $(r - 3)(r - 1)$ number of vertices in G . That is, $d(v) = r$ and $d_2(v) = (r - 3)(r - 1)$, for all v in G . In this paper, we suggest a method to construct for any $r \geq 3$, there is $(r, 2, (r - 3)(r - 1))$ - regular graph on $4 \times 2^{r-3}$ vertices.

Key Words : *Degree of graph, Regular graph, Distance degree regular graphs, $(2, k)$ -regular graphs, k -semi regular graphs.*

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