

**عنوان مقاله:**Perfect  $r$ -Colorings of the  $3$ -Regular Graphs of Order  $10$ **محل انتشار:**

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**خلاصه مقاله:**

The perfect  $m$ -coloring with matrix  $A = [a_{ij}]_{i,j \in \{1, \dots, m\}}$  of a graph  $G = (V, E)$  with  $\{1, \dots, m\}$  color is a vertices coloring of  $G$  with  $m$ -color so that number of vertex in color  $j$  adjacent to a fixed vertex in color  $i$  is  $a_{ij}$ , independent of the choice of vertex in color  $i$ . The matrix  $A = [a_{ij}]_{i,j \in \{1, \dots, m\}}$  is called the parameter matrix. We study the perfect  $r$ -colorings of the  $3$ -regular graphs of order  $10$ , that is, we determine a list of all color parameter matrices corresponding to perfect colorings of  $3$ -regular graphs of order  $10$ .

**کلمات کلیدی:**

Perfect coloring, Parameter matrices, Cubic graph, Equitable partition

**لینک ثابت مقاله در پایگاه سیویلیکا:**<https://civilica.com/doc/1541383>