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Some families of chromatically unique bipartite graphs. (English) Zbl 0958.05054
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Summary: A graph is said to be chromatically unique (or χ -unique) if it is uniquely determined by its chromatic polynomial. Let $K^{-r}(p, q)$ denote the family of graphs obtained from $K_{p, q}$ by deleting any r distinct edges. In this paper, we study the chromaticity of the graphs in $K^{-r}(p, q)$. A sufficient condition is given for a member of $K^{-r}(p, q)$ to be χ -unique and some families of χ -unique bipartite graphs are obtained. A conjecture is also proposed.

MSC:

05C15 Coloring of graphs and hypergraphs

Keywords:

chromatically unique; chromatic polynomial; chromaticity

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