

The Conclusion to the Edge-Balanced Index Set Problem for Complete Bipartite Graphs

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In 2009, Kong, Wang, and Lee introduced the problem of finding the edge-balanced index set (*EBI*) of a complete bipartite graph, $K(m, n)$, where $m \geq n$, by examining the cases $n = 1, 2, 3, 4, 5$, and the case $m = n$. Since then, the problem of finding $EBI(K(m, n))$ has been completely resolved in three cases: for the case where m is odd and n is even, and for the two cases where m and n have the same parity. In this talk, we share our results on $EBI(K(m, n))$ where m is even and n is odd, thereby concluding the problem of finding the edge-balanced index sets for complete bipartite graphs.

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