

# Monochromatic Cycles in Colored Graphs

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## **Abstract**

Results and open questions on the existence of monochromatic cycles in  $k$ -edge colored complete graphs will be discussed. Known  $k$ -colored Ramsey numbers ( $k \geq 3$ ) for cycles will be presented, and open questions for such Ramsey numbers will also be presented. Also, a result on the monochromatic circumference of  $k$ -edge colored complete graphs will be presented along with a general conjecture about the monochromatic circumference of a  $k$ -edge colored complete graph.