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*Regular graphs with the most number of k-cycles.*

We investigate which $d$-regular graphs have the most $k$-cycles per node, and find the answer for $k \leq 6$ and large enough $d$. Besides the usual notion of cycles, we also study variants for counting closed walks and closed non-backtracking walks. It turns out that these variants are actually easier to handle, and we can determine the answer for all $k$. Joint work with Arturo Ortiz San Miguel.