

Review of: "Zero-Divisor Graphs of \mathbb{Z}_n , their products and D_n "

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In this paper, the authors discuss some properties of zero-divisor graphs of the ring \mathbb{Z}_n , the product of \mathbb{Z}_n and D_n . The results are rich. But the arrangement and expressions need some improvement. Here some suggestions:

1. The authors should give the explicit definition for some concepts, such as, perfect graph, γ -perfect, chordality, simplicial vertices, etc.
2. Simplified the proofs as clear and simple as possible. For example, in Section 2, to characterize the perfectness of $\Gamma(\mathbb{Z}_{n_1} \times \mathbb{Z}_{n_2} \times \dots \times \mathbb{Z}_{n_k})$. As in [3] (Th2.4-2.7), Theorem 2.12 can be followed directly from Th2.8-2.11. So there is no need to give theorem 2.13-2.15. Th 2.19 can be expressed more explicit since when $k \geq 5$, $\Gamma(\mathbb{Z}_{n_1} \times \mathbb{Z}_{n_2} \times \dots \times \mathbb{Z}_{n_k})$ can not be perfect. Thus there only leaves $k=1,2,3,4$ which can be given as "Smith's Main Theorem".

In Section 3, the properties of $\Gamma(\mathbb{Z}_n)$ is not difficult to characterize by its (strong) type graph. So I suggest to give general results first, such as Th3.4-3.6, then others as corollaries. The proofs also should be reorganized in order to increase the readableness.
3. The content of Section 5 seems not closely related to the contents of the previous sections. So maybe it is better to be deleted.
4. Check the paper throughout to decrease the grammar mistakes and typos as little as possible.