

# Turkish Journal of Mathematics

Turkish Journal

of

Mathematics

The Basis Number of the Semi-Composition Product of Some Graphs I

M. M. M. JARADAT, E. A. RAWASHDEH,  
M. Y. ALZOUBI

Department of Mathematics,  
Yarmouk University,  
Irbid-JORDAN

e-mail: mmjst4@yu.edu.jo,

e-mail: edris@yu.edu.jo,

e-mail: maref@yu.edu.jo

 [Keywords](#)  
 [Authors](#)



[math@tubitak.gov.tr](mailto:math@tubitak.gov.tr)

[Scientific Journals Home](#)  
[Page](#)

**Abstract:** The basis number of a graph  $G$  is defined to be the least integer  $d$  such that there is a basis  $\mathcal{B}$  of the cycle space of  $G$  such that each edge of  $G$  is contained in at most  $d$  members of  $\mathcal{B}$ . We investigate the basis number of the semi-composition product of two paths and a cycle with a path.

**Key Words:** Basis number; cycle space; fold; semi-composition product

---

Turk. J. Math., **29**, (2005), 349-364.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Math., vol.29, iss.4.](#)