

عنوان مقاله:

On a question concerning the Cohen's theorem

محل انتشار:

مجله جبر و موضوعات مرتبط، دوره 11، شماره 1 (سال: 1402)

تعداد صفحات اصل مقاله: 5

نویسندگان:

S. S. Pourmortazavi - Department of Mathematics, Guilan University, Rasht, Iran

S. Keyvani - Department of Mathematics, Bandar Anzali Branch, Islamic Azad University, Bandar Anzali Branch, Iran

خلاصه مقاله:

Let  $R$  be a commutative ring with identity, and let  $M$  be an  $R$ -module. The Cohen's theorem is the classic result that a ring is Noetherian if and only if its prime ideals are finitely generated. Parkash and Kour obtained a new version of Cohen's theorem for modules, which states that a finitely generated  $R$ -module  $M$  is Noetherian if and only if for every prime ideal  $p$  of  $R$  with  $\text{Ann}(M) \subseteq p$ , there exists a finitely generated submodule  $N$  of  $M$  such that  $pM \subseteq N \subseteq M(p)$ , where  $M(p) = \{x \in M \mid sx \in pM \text{ for some } s \in R \setminus p\}$ . In this paper, we prove this result for some classes of modules.

کلمات کلیدی:

Noetherian modules, Cohen's theorem,  $X$ -injective

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/2026867>

