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On regular semigroups whose idempotents form a semigroup: Addenda

T. E. Hall

The results in the first parts of Theorems 2 and 3 of the paper in the title (see [2]) have been previously obtained by B.M. Schein in Theorem 1.12, page 299 [4], and in Proposition 1.13 (combined with the last paragraph of page 300) [4], respectively. To deduce the first part of Theorem 2 [2] from Theorem 1.12 [4] one merely uses the fact that a binary relation R on a set X satisfies $RR^{-1}R \subseteq R$ if and only if it satisfies: $R(x) \cap R(y) \neq \square$ implies $R(x) = R(y)$, for any $x, y \in X$ (see Proposition 9, page 132 [3]).

Conversely, one can deduce the mentioned results in [4] from those in [2] by observing that all the regular elements in any semigroup form a subsemigroup if (and clearly only if) the product of each pair of idempotents is a regular element, in particular when all the idempotents form a subsemigroup (from Theorem 2.4, page 49 [1]).

The equivalence of *(i)* and *(ii)* in Result 1 [2] (cited as due to N.R. Reilly and H.E. Scheiblich) has also been obtained by B.M. Schein in Theorem 1.10, page 298 [4].

References

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