

**Proof reading for “Matrix identities involving multiplication and transposition” by Auinger et al**

Location	Type	In the proofs	In the original	Should be
P.1, footnote, line +4	Update	21000	21000	21101
P.1, footnote, line +5	Update	Faculty of Mathematics and Mechanics, Ural State University	Faculty of Mathematics and Mechanics, Ural State University	Institute of Mathematics and Computer Science, Ural Federal University
P.1, footnote, line +6	Update	620083	620083	620000
P.2, line +21	Typo (our fault)	... may be <b>a</b> summarized ...	... may be <b>a</b> summarized ...	... may be summarized ...
P.2, Theorem, line +1	Editor’s intervention	<b>None</b> of <b>the</b> following sets of matrix identities admits <b>a</b> finite identity basis:	Each of following sets of matrix identities admits no finite identity basis:	We quite agree with moving the negation into the subject but according to standards of English grammar, when the sense is plural (as indicated by a plural noun or pronoun in the following prepositional phrase—“none of [plural entity]”), “none” is plural. So the phrase should be: None of the following sets of matrix identities admit a finite identity basis:
P.3, line +18	Editor’s intervention	... then so is $u^*$ .	... then so is $(u)^*$ .	As in the original (we <b>do not</b> accept the change)
P.3, line +20	Editor’s intervention	$u \mapsto u^*$ .	$u \mapsto (u)^*$ .	As in the original (we <b>do not</b> accept the change)
P.3, line –3	Typo (our fault)	A variety is <b>is</b> said to be ...	A variety is <b>is</b> said to be ...	A variety is said to be ...
P.7, matrix $M_n(g)$ , entry (4,4)	Editor’s intervention	$\vdots$ (produced by <code>\vdots</code> )	$\ddots$ (produced by <code>\ddots</code> )	As in the original (we <b>do not</b> accept the change)
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Location	Type	In the proofs	In the original	Should be
P.11, line +5	Editor's intervention	... to $(1, 2, \dots, r, \dots, 1, 2, \dots, r)^t$ where the block $1, 2, \dots, r$ occurs $r$ times.	... to the trans- pose of the row $(1, 2, \dots, r, \dots, 1, 2, \dots, r)$ in which the block $1, 2, \dots, r$ occurs $r$ times.	We <b>do not</b> accept the change in the proposed form. The notation $(\dots)^t$ for the transpose is incon- sistent with the notation elsewhere in the paper. We suggest: ... to the transpose of $(1, 2, \dots, r, \dots, 1, 2, \dots, r)$ where the block $1, 2, \dots, r$ occurs $r$ times.
P.15, lines –20 and –19	Update	We say that $b$ <i>strictly di- vides</i> $a$ and write $a <_{\mathcal{R}} b$ if $a = bs$ for some $s \in S$ but $b \neq a$ and $b \neq at$ for any $t \in S$ .	We say that $b$ <i>strictly di- vides</i> $a$ and write $a <_{\mathcal{R}} b$ if $a = bs$ for some $s \in S$ but $b \neq a$ and $b \neq at$ for any $t \in S$ .	Remove the whole sen- tence
P.15, lines –18 and –17	Update	$\mathcal{R}$ is an equivalence relation (known as the <i>right Green relation</i> in semigroup theory) and $<_{\mathcal{R}}$ is transitive and anti-reflexive.	$\mathcal{R}$ is an equivalence relation (known as the <i>right Green relation</i> in semigroup theory) and $<_{\mathcal{R}}$ is transitive and anti-reflexive.	$\mathcal{R}$ is an equivalence rela- tion (known as the <i>right Green relation</i> in semi- group theory). (Remove the part of the sentence after the clause in parentheses.)
P.15, lines –9, –8, and –7	Update	Further let $h$ denote the length of the longest possi- ble chain of the form  $s_1 <_{\mathcal{R}} s_2 <_{\mathcal{R}} \dots <_{\mathcal{R}} s_k$ .	Further let $h$ denote the length of the longest possi- ble chain of the form  $s_1 <_{\mathcal{R}} s_2 <_{\mathcal{R}} \dots <_{\mathcal{R}} s_k$ .	Remove the whole sen- tence
P.15, line –6	Update	Set $n = h + 1$ ; Lemma 7 in [37] shows ...	Set $n = h + 1$ ; Lemma 7 in [37] shows ...	Set $n =  S  + 1$ ; Lemma 7 in [37] <b>implies</b> ...
P.18, line +5	Update	... admits an involution ...	... admits an involution ...	... admits a <b>ring</b> involution ...
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Location	Type	In the proofs	In the original	Should be
P.24, line +7	Typo (our fault) + Editor's intervention	$b^{\ell_1} a^{k_1} \dots b^{\ell_{t-1}} a^{k_{t-1}} b^{k_t},$	$b^{\ell_1} a^{k_1} \dots b^{\ell_{t-1}} a^{k_{t-1}} b^{k_t}$	$b^{\ell_1} a^{k_1} \dots b^{\ell_{t-1}} a^{k_{t-1}} b^{\ell_t},$
P.29, line +17	Update	the name suggested in \cite{Kim}	the name suggested in \cite{Kim}	the name suggested in \cite{Schwarz}
P.31, Acknowledgements, line -1	Typo (our fault)	...grants 10-01-00524.	...grants 10-01-00524.	...grant 10-01-00524.
P.32, item [27]	Update	\bibitem{Kim} Kim, K. H.: The semi-groups of Hall relations. Semigroup Forum <b>9</b> , 253–260 (1974) Zbl 0292.20061 MR 0376910	\bibitem{Kim} Kim, K. H.: The semi-groups of Hall relations. Semigroup Forum <b>9</b> , 253–260 (1974)	Remove this item
P.33, item [45], line +2	Typo (our fault)	(2006)	(2006)	(2007)
P.33, between items [51] and [52]	Update	Insert new item: \bibitem{Schwarz} Schwarz, Š.: The semigroup of fully indecomposable relations and Hall relations. Czechoslovak Math. J. <b>23</b> , 151–163 (1973) Zbl 0261.20057 MR 0316612		
P.34, item [55], line +2	Typo	Zb 1074.20036		Zbl 1074.20036