

Erratum: “Unique range sets in positive characteristic,” *Acta Arithmetica* 103 (2002), pp. 169–189

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Ta Thi Hoi An was kind enough to point out to us an error in [1]. Theorem 3.1 is false as stated. The condition (A2) must be replaced by the stronger assumption: (A2)  $(n, m) = 1$ . Thus, we need  $n$  and  $m$  relatively prime in either version of the theorem. Our mistake is on page 187. From the formula,

$$g^{n-m} = a \frac{h^m - 1}{h^n - 1},$$

we conclude that if  $h$  is constant, then  $g$  must also be constant. Of course, the other possibility is that  $h$  is simultaneously an  $n$  and  $m$ -th root of unity. But, if  $n$  and  $m$  are relatively prime, then there are no non-trivial  $n$ -th roots of unity which are also  $m$ -th roots of unity, and our proof is correct in that case.

Fortunately, our main application of Theorem 3.1, namely showing there exist unique range sets of all finite cardinalities  $\geq 4$  in all characteristics, remains valid. That is because in all of our applications of Theorem 3.1, *e.g.*, Corollary 3.2, it was always the case that  $(n, m) = 1$ .

## References

- [1] A. BOUTABAA, W. CHERRY, AND A. ESCASSUT, *Unique range sets in positive characteristic*, *Acta Arith.* **103** (2002), 169–189.

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