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## CORRIGENDUM ON THE PAPER "AN APPLICATION OF ALMOST INCREASING AND $\delta-$ QUASI-MONOTONE SEQUENCES" PUBLISHED IN JIPAM, VOL.1, NO.2. (2000), ARTICLE 18

H. BOR

DEPARTMENT OF MATHEMATICS, ERCIYES UNIVERSITY, KAYSERI 38039, TURKEY

bor@erciyes.edu.tr

URL: http://math.erciyes.edu.tr/hbor.htm

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ABSTRACT. This paper is a corrigendum on a paper published in an earlier volume of JIPAM, 'An application of almost increasing and  $\delta$ -quasi-monotone sequences' published in JIPAM, Vol.1, No.2. (2000), Article 18.

Key words and phrases: Almost Increasing Sequences, Quasi-monotone Sequences, Absolute Summability Factors, Infinite Series.

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In my paper [1], we need an additional condition in Theorem 2.1 and Lemma 2.3. The new statements of Theorem 2.1 and Lemma 2.3 should be given as follows:

**Theorem 1.** Let  $(X_n)$  be an almost increasing sequence such that  $|\Delta X_n| = O(X_n/n)$  and  $\lambda_n \to 0$  as  $n \to \infty$ . Suppose that there exists a sequence of numbers  $(A_n)$  such that it is  $\delta$ -quasi-monotone with  $\sum n \delta_n X_n < \infty$ ,  $\sum A_n X_n$  is convergent and  $|\Delta \lambda_n| \le |\Delta A_n|$  for all n. If the other conditions of Theorem 2.1 are satisfied, then the series  $\sum a_n \lambda_n$  is summable  $|\bar{N}, p_n|_k, k \ge 1$ .

**Lemma 2.** Let  $(X_n)$  be an almost increasing sequence such that  $n |\Delta X_n| = O(X_n)$ . If  $(A_n)$  is  $\delta$ -quasi-monotone with  $\sum n \delta_n X_n < \infty$ ,  $\sum A_n X_n$  is convergent, then

$$nA_nX_n = O(1),$$

$$\sum_{n=1}^{\infty} nX_n |\Delta A_n| < \infty.$$

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The proof of Lemma 2 is similar to the proof of Theorem 1 and Theorem 2 of Leindler ([2]) and we omit it.

## REFERENCES

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- [2] L. LEINDLER, Three theorems connected with  $\delta$ -quasi-monotone sequences and their application to an integrability theorem , *Publ. Math.* (Debrecen), **59** (2002) (to appear).