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Corrigendum to "On the Diophantine equation $X^2 + 7^{\alpha}.11^{\beta} = y^n$ [Miskolc Math. Notes, Vol.13 (2012) No. 2, pp. 515-527]

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CORRIGENDUM TO “ON THE DIOPHANTINE EQUATION $X^2 + 7^\alpha \cdot 11^\beta = Y^N$” [MISKOLC MATH. NOTES, VOL. 13 (2012) NO. 2, PP. 515-527.]

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Abstract. This note presents some corrections to (Miskolc Math. Notes, Vol. 13 (2012) No. 2, pp. 515-527.)

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The author regrets some technical mistakes in the proof of Lemma 3 specifically: In page 524, between the lines 9 and 11 statement that “So $\pm 11^{\beta_1} \equiv 1 \pmod 8$, showing that the sign on the left hand side is positive and β_1 is odd, or the sign on the left hand side is negative and β_1 is even.” must be deleted.
It should be written as “So $\pm 11^{\beta_1} \equiv 1 \pmod 8$, showing that the sign on the left hand side is positive and β_1 is even.”
In page 524, between the lines 12 and 16 the statement that “Assume first that $\beta_1 = 2\beta_0 + 1$ be odd. We get

$$11V^2 = 5U^4 - 70U^2 + 49,$$

where $(U,V) = (u/v, 11^{\beta_0}/v^2)$ is a $\{7\}$-integral point on the above elliptic curve. We get that the only such points on the above curve are $(U,V) = (\pm 7, \pm 28)$. This does not lead to solutions of our original equation.” must be deleted.

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