CORRIGENDUM TO: HERON TRIANGLES WITH FIGURATE NUMBER SIDES

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It was discovered that the original online version of the paper contained a mistake, on page 481, lines -4 to -1.

It should be changed into the following:

From $X = (4t^4 - 1)x + 4t^3 + 1$ and $X_{2n} = 2(8t^4 - 1)X_{2n-2} - X_{2n-4}$, we have

$$x_{2n} = 2(8t^4 - 1)x_{2n-2} - x_{2n-4} + 4(4t^3 + 1), \quad x_0 = 1, \quad x_2 = 16t^4 + 16t^3 + 1$$

for each $n \geq 2$. Noting that

$$x_0 \equiv 1 \pmod{16}, \quad x_2 \equiv 1 \pmod{16},$$

and

$$x_{2n} = 16t^3(tx_{2n-2} + 1) - 2(x_{2n-2} - x_{2n-4}) - 3x_{2n-2} + 4,$$

then we get

$$x_{2n} \equiv 1 \pmod{16}, \quad \text{i.e.,} \quad \frac{x_{2n} - 1}{16} \in \mathbb{Z}^+.$$

Meanwhile, from the recurrence relations (2.2), we have $[W_{2n} \in \mathbb{Z}^+, \text{ i.e., } w_{2n} \in \mathbb{Z}^+]$. Therefore,

$$x_{2n} \in \mathbb{Z}^+, \quad y_{2n} = tx_{2n} + 1 \in \mathbb{Z}^+, \quad A_{2n} = \frac{1}{16}x_{2n}^2(x_{2n} - 1)w_{2n} \in \mathbb{Z}^+.$$

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