Theorem 4.2:

$$W_{6n+k} - (-1)^n q^{2n} W_{2n+k} \equiv 0 \pmod{(p^2 - 2q)}, \tag{4.4}$$

$$W_{10n+k} - (-1)^n q^{4n} W_{2n+k} \equiv 0 \pmod{(p^4 - 4p^2q + 2q^2)}, \tag{4.5}$$

$$W_{18n+k} - (-1)^n q^{8n} W_{2n+k} \equiv 0 \pmod{\Delta}.$$
(4.6)

5. A REMARK

Some of the results in this paper are not as "practical" as others. For example, if we put n = 10 and k = 0 in (2.13), then we seek to find W_{40} . However, on the right-hand side, we need to know $W_6, W_{12}, W_{18}, \ldots, W_{60}$ (and many other terms) in order to find W_{40} . In contrast, (2.14) is more practical since, in order to find W_{60} , we need to know the value of terms whose subscripts are much less than 60.

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REFERENCES

- L. Carlitz & H. H. Ferns. "Some Fibonacci and Lucas Identities." *The Fibonacci Quarterly* 8.1 (1970):61-73.
- 2. A. F. Horadam. "Basic Properties of a Certain Generalized Sequence of Numbers." *The Fibonacci Quarterly* **3.2** (1965):161-76.
- 3. L. C. Hsu & Jiang Maosen. "A Kind of Invertible Graphical Process for Finding Reciprocal Formulas with Applications." *Acta Scien. Nat. Univ. Jilinensis* **4** (1980):43-55.
- 4. R. S. Melham & A. G. Shannon. "A Generalization of the Catalan Identity and Some Congruences." *The Fibonacci Quarterly* **33.1** (1995):82-84.
- 5. R. S. Melham & A. G. Shannon. "Some Congruence Properties of Generalized Second-Order Integer Sequences." *The Fibonacci Quarterly* **32.5** (1994):424-28.

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