

$$x^2 B_n(x^2) = x f_{2n+2}(x)$$

or

$$(29) \quad B_n(x^2) = \frac{1}{x} f_{2n+2}(x)$$

Thus,  $B_n(x)$ ,  $b_n(x)$  and  $f_n(x)$  are interrelated.

(See also H-73 Oct. 1967 pp 255-56)

#### REFERENCES

1. A. M. Morgan-Voyce, "Ladder Network Analysis Using Fibonacci Numbers," IRE Transactions on Circuit Theory, Vol. CT-6, Sept. 1959, pp. 321-322.
2. M. N. S. Swamy, "Properties of the Polynomials Defined by Morgan-Voyce," Fibonacci Quarterly, Vol. 4, Feb. 1966, pp. 73-81.
3. M. N. S. Swamy, "More Fibonacci Identities," Fibonacci Quarterly, Vol. 4, Dec. 1966, pp. 369-372.
4. M. N. S. Swamy, Problem B-74, Fibonacci Quarterly, Vol. 3, Oct. 1965, p. 236.

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(Continued from p. 161.)

(Compare this problem with H-65 and above solution formula with the formula

$$\frac{2x}{1 - 4x - x^2} = \sum_{n=0}^{\infty} F_{3n} x^n$$

in the Fibonacci Quarterly, Vol. 2, No. 3, p. 208.)

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