$$\left(\frac{1+x-x^2}{1-x^2}\right) \cdot \frac{1}{(a-b)^2} \left[(a^2 + a^4x^2 + a^6x^4 + \cdots) + (b^2 + b^4x^2 + b^6x^4 + \cdots) - 2ab(1+abx^2 + a^2b^2x^4 + \cdots) \right]$$

$$= \left(\frac{1+x-x^2}{1-x^2}\right) \cdot \frac{1}{(a-b)^2} \left[\frac{a^2}{1-a^2x^2} + \frac{b^2}{1-b^2x^2} - \frac{2ab}{1-abx^2} \right],$$

which simplifies to

$$\left(\frac{1+x-x^2}{1-x^2}\right)\left(\frac{(1-x^2)}{(1+x^2)(1-3x^2+x^4)}\right) = \frac{1+x-x^2}{(1+x^2)(1-3x^2+x^4)}.$$

Also solved by Paul S. Bruckman, R. Garfield, John W. Vogel, and the proposer.

ERRATA

The following errors have been noted:

Volume 16, No. 5 (October 1978), p. 407 [J. A. H. Hunter's "Congruent Primes of Form (8r+1)"]. The equations presented in the second line of the article should read

$$X^{2} - eY^{2} = Z^{2}$$
, and $X^{2} + eY^{2} = W^{2}$.

Volume 17, No. 1 (February 1979), p. 84 (A. P. Hillman & V. E. Hoggatt, Jr.'s "Nearly Linear Functions"). Equation (1) should read

(1)
$$C' \cdot H - C \cdot H = \sum_{i=1}^{k} (c_i' - c_i) h_i \ge h_k - \sum_{i=1}^{k-1} c_i h_i.$$

The second line of the proof of Lemma 7 should read

The hypothesis $E \cdot E' = 0$ implies . . .

In the proof of Theorem 1, Equation (10) should read

(10)
$$b_{j}(m) = C_{m-1}^{*} \cdot H_{j} - C_{m-1} \cdot H_{j}.$$

(Kindness of Margaret Owens)