

## ACKNOWLEDGEMENTS

1. The vector space  $F$  is one element of the space of sequences noted by E. D. Cashwell and C. J. Everett, "Fibonacci Spaces," Fibonacci Quarterly, Vol. 4, No. 2, pp. 97-115.
2. The characteristic number of a sequence was used by Brother U. Alfred, "On the Ordering of Fibonacci Sequences," Fibonacci Quarterly, Vol. 1, No. 4, 1963, pp. 43-46. [See Correction, p. 38, Feb. 1964 Quarterly.]
3. A definition for ring multiplication,

$$UV = (u_0v_1 + u_1v_0 - u_1v_1, u_0v_0 + u_1v_1) ,$$

was given by Ken Dill in a paper submitted to the Westinghouse Talent Contest.

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## ROMANCE IN MATHEMATICS

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The dome of the famous Taj Mahal, built in 1650 in Agra, India, is ellipsoidal. Now, the ellipse has the geometric property that the angles formed by the focal radii and the normal at a point are congruent. Also, it is a fundamental principle of behavior of sound waves that the angle of incidence equals the angle of reflection. Thus, sound waves issuing from focus A and striking any point on the ellipse will be reflected through focus B.

The builder of the Taj Mahal, Shan Jehan, used these basic principles well in his memorial to his favorite wife who was called Taj Mahal, Crown of the Palace. Honeymooners who visit the shrine are instructed to stand on the two foci which are marked in the tile floor. The husband whispers, "To the memory of an undying love," which can be heard clearly by his wife who is more than fifty feet away but by no one else in the room.

## REFERENCE

Kramer, Edna E., "The Mainstream of Mathematics," Premier (paperback), New York, 1961, p. 152.