HOW MUCH IS ALBUQUERQUE?

Despite the mathematics involved, computer buffs and nonbuffs met on equal ground in this contest. One entrant reported spending a couple of hours writing a program (which then solved the puzzle in three seconds); others worked it out with pencil and paper in the same time or less.

We secretly gave each letter of the alphabet a different value from 1 to 26. Then we listed 44 place names, and for each gave the total value of its letters. Entrants had to find the value of ALBUQUERQUE. But since none of the names listed contained a Q, the values of all the other letters had to be discovered to find Q's value. Most of the nearly 8,100 entries had the right value for ALBUQUERQUE, which is 102.

Getting the answer by hand involved adding and subtracting the equations until the values of individual letters were found. A short way to break into the puzzle was found by Anthony Cutler, of New York City, who set up the following formulas:

$$TE = WICHITA + MAINE + GO - MICHIGAN - IOWA$$
$$H = HAWAII + NOME - MAINE - IOWA$$
$$LS = TULSA + H - UTAH$$
$$A = SEATTLE - LS - TE - TE$$
$$O = (OHIO + IOWA + A - HAWAII) \div 3$$
$$EM = SALEM - LS - A$$
$$M = (MONTGOMERY + EM - MONTEREY - GO) \div 2$$

The rest of the values can then be found easily.

The winner, chosen randomly from all correct entries, is Estel L. Vandergriff, of Bidwell, Ohio, who will receive a turquoise and silver pendant. Five runner-up prizes of GAMES T-shirts go to: Bruce A. Fellner, Huntington, NY; A. Heimert, Libertyville, IN; Alfred Powell, Santa Fe, NM; S. J. Skead, San Ramon, CA; and Russ Stocker, Phoenix, AZ. By a pleasant coincidence (?), Mr. Powell's entry was postmarked in Albuquerque.

—S. M.

THE VALUES

A = 10	G = 23	N = 4	T = 14
B = 20	H = 13	O = 5	U = 7
C = 3	I = 24	P = 22	V = 26
D = 12	J = 9	Q = 1	W = 25
E = 6	K = 16	R = 18	X = 11
F = 15	L = 19	S = 8	Y = 17
	M = 21		Z = 2

ALBUQUERQUE = 102