# ANSWERS AND SOLUTIONS

#### HODGEPODGE by John Ferguson

Alfred the Great, Attila the Hun, Baltimore oriole, bar the way, Berlin Wall, Billy the Kid, booby trap, bootleg, Boston Strangler, bravery, Brussels sprouts, button down, canary yellow, capsize, cardinal number, Chicago fire, chicken pox, climb on the bandwagon, cloud on the horizon, collarbone

corn on the cob, crowbar, cuckoo clock, cufflink, Dennis the Menace, dovetail, down on the farm, dressmaker, drinks on the house, duck soup, eagle scout, easy on the eyes, emulate, Eric the Red, Erie Canal, Ferdinand the Bull, Fiddler on the Roof, Frosty the Snowman, garter snake, Geneva Convention

gooseflesh, Hagar the Horrible, hanky panky, Harlem Globetrotters, hatband, Havana cigar hawkeye, high on the hog, home on the range, icing on the cake, Indianapolis 500, lvan the Terrible, Jack the Ripper, jaywalk, John the Baptist, kitten on the keys, knock on the door, larkspur, lima beans, London Bridge

Mack the Knife, night on the town, Nutcracker Suite, pajama party, pat on the back, Peking duck, pigeonhole, Plymouth Rock, Popeye the Sailor Man, Portland cement, quick on the draw, Richard the Lionhearted, Robin Hood, Rosie the Riveter, Saint Louis blues, sandalwood, San Francisco earthquake, Scotch on the rocks, Sermon on the Mount, shoe tree

slap on the wrist, slipknot, Smokey the Bear, Stan the Man, step on the gas, Stork Club, suitable, swan song, tam o'shanter, tie clasp, Tijuana Brass, turkey trot, vestment, Vienna sausage, Warsaw Concerto, water on the knee, William the Conqueror, Winnie the Pooh, Zorba the Greek

#### SOLUTION OF THE GEMATRIC EQUATIONS by Lee Sallows

The easy answer is to see that any such set of linear equations is immediately satisfied when all of the variables are set to zero. Now zero is an integer. So if there is just one single solution using not necessarily distinct integers this has to be it! Only a masochist would approach this problem the hard way:

Assume n and t are known, then one can sequentially solve for all other letters. From 9, e = -2n. From 20+25, y = t+e =t-2n. From 20, w = -e-n-t-y = 3n-2t. From 20+23, c = w-t =3n-3t. From 12, v = -t-w-2e = t+n. From 20+22, b = v-t = n. From 2, o = b-t-w = t-2n. From 9-1, a = o-n = t-3n. From 20+21, u = t+a = 2t-3n. From 10, j = t+e+n = t-n. From 4-,14, d =-t-2e = 4n-t. From 20+24, x = t+d = 4n. From 5, i+f = -v = -t-n. From 15, f = o-(i+f)-t-2e-n = t+2n. From 5, i = -f-v = -3n-2t.

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From 3,13, m = c+t+i+n = n-4t. From 6, s = f-i-x = n+3t. From 7, g = s+2e+v+n = 4t-n. From 4, r = d-f-o-u = 7n-5t. From 3, h = c-t-r-2e = t. From 6,16, p = f+t+2e+n = 2t-n. From 7,17, q = g+t+2e+n = 5t-4n. From 20+26, z = t+f = 2n+2t. But, from 8, 0 = e+i+g+h = 3t-6n. Thus t = 2n, showing that all previous variables are arithmetic multiples of n. And whereas r = 7n - 5t = -3n, from 8,18 r = h+2e+n = -n. So n = 3n, or n = 0. So, with k = 0, from 11, 1 = k-3e-v-n = 0, which proves that the only set of values to satisfy the equations is twenty-six zeroes! Of course, setting  $k = 1,2,3,\ldots$  leads to an infinite series of trivially distinct solutions  $(1 = 1,2,3,\ldots)$  and the others zero). Consolation prize: z+e+r+o = 0.

### DIRECTED WORD NETWORKS (PART 3) by Leonard Gordon

Of the  $28 \times 28 \approx 784$  possible combinations of frags, 123 are words in my list. Here is what the computer was able to make from them (all are solid eight-letter words).

back-fire-side-long	dove-ring-side-long	fire-back-door-bell
wash-tail-head-ship	tail-bone-head-ship	side-bone-head-wind
land-wind-ring-worm	back-wood-skin-worm	long-wood-skin-ball
lady-fish-bone-wood	land-wind-ball-weed	hand-fish-worm-weed

- 2A: billhead, hookland, loadstar, tailhead, tailwind, yardland
- 2B: bearwood, bonewood, dateline, downhill, downland, downline, dropline, fallback, fireback, firewood, flapdock, handbank, handline, handrail, haulback, kickback, kickdown, landiron, landline, landrail, landship, restring, stopback, stopbank, stopover, tackline, wardship, washdown, washland, windburn, windring, windroad, windship, woodland, workbank, workship, yardland
- 2C: bandfish, landskip, landwash, landwire, lockwire, longboat, longhair, longhorn, restrain, ringbone, ringdove, ropeband, sailboat, sailfish, winddogs, windfish, windmill, windring, workboat
- 2D: horsemen 2E: versemen

### KICKSHAWS by Dave Morice

- Palindromic Spelling Bee PALENDROME was first; PALANDROME and PALLENDROME were second.
- Palindromic Crossword Across l-gig, 2-tat, 5-pep, 7-deified, 8-pep, 9-gag, 10-tot. Down l-gnu dung, 3-tend net, 4-refer, 5-pip, 6-pip
- There's Many a Slip Twixt Pils and Lips BUDWEISER BEER
- Olden Letters Embed Themselves in Emboldened Words Each sentence contains a word deletion trio, and the title is a definition of word deletions with a deletion trio in it (EMB-OLDEN-ED). Most examples come from Christopher McManus's May 1991 article.
- Linguistic Entropy The first five entries in the dictionary: A,A,A, A, and A. Trivial, but true. This suggests that the following rule be applied in searching for examples of entropy: words spelled the same should be counted as only one entry.

Bidigital Palindrome ABA LULL KULAK KAKA BALK BAB ALULA

Days of Palindromes False. There are 33 Days of Palindromes: 1-1, 1-21, 1-31, 2-2, 2-12, 2-22, 3-3, 3-13, 3-23, 4-4, 4-14, 4-24, 5-5, 5-15, 5-25, 6-6, 6-16, 6-26, 7-7, 7-17, 7-27, 8-8, 8-18, 8-28, 9-9, 9-19, 9-29, 10-1, 11-1, 12-1, 12-21.

## THE CASE OF THE SIX PILES by Walter Shedlofsky

"Lieutenant Jamison, this is Lewis Steinbeck. The number of cards in the sixth pile was 32. The killer was Phyllis Steen. Of the four suspects, she was the only one most likely to be associated with a geometric expression."

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I certify that the statements made by me above are correct and complete /s/ Faith W. Eckler, Business Manager, October 1, 1991

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