proportional to the fraction of occurrence of one-letter two-letter three-letter four-letter five-letter

\[
\left( \frac{f_{\text{total}}}{(0.268)} \right) = \sum \left( \frac{f_{\text{occurrence}}}{0.0402} \right)
\]

Where \( f_{\text{total}} \) is the total number of occurrences, and \( f_{\text{occurrence}} \) is the number of occurrences.

Donald Barnes of Sierra Madre, California wonders what the minimum Scrabble game score is -- the smallest array of Scrabble-valid letters that cannot be extended by adding more letters. The answer to this problem depends upon the dictionary used, as well as a more careful definition of what "more letters" means. If one is allowed to use any letters in the stockpile, it is difficult to conceive of any small letter array that cannot be added to. On the other hand, if one is allowed to specify the letters held by the two players, then the problem becomes much easier -- give each a fistful of rare consonants. Darryl Francis notes that it is possible to construct a Scrabble game which never even starts.

In the finals of the (British) National Scrabble Championship, no more than four exchanges of letters are allowed. It is not difficult to specify ten sets of seven letters, each set unable to form a word; form some out of consonants, and others out of identical vowels. If the final two racks are ZQXJKVV and WWHFFC, the game score will be -49 to -27.

Joseph T. Hogan of Arabi, Louisiana notes that the United States will be celebrating another anniversary in 2026 -- but what name will this have? Apparently, no one has coined a name for it, even though the rather more specialized 125th anniversary is known as a quasquicentennial (Webster's Third Addenda). Dmitri Borgmann suggests either biquasquicentennial \((2 \times 125)\) or semiquincentenary \((1/2 \times 500)\).

Errata: In "Poems in Praise of English Phonology", the label spical should be changed to apical in the table of consonant sounds. The answer to the 7th problem is not voiceless, obstructed but should be voiced unobstructed. John Collins points out that the verses on page 238 of the November 1975 Word Ways should have been titled "A Chronicle".

Paul Leopold, sojourning in England, notes that the British commonly use the words WAY OUT to denote an exit. In what way is a neon sign with this message superior to the American EXIT? (Hint: think of the letters of the sign in a vertical column.) When you give up, turn the page for an explanation.

Webster's Dictionary defines colloquy as mutual discourse. Readers are encouraged to submit additions, corrections and comments about earlier articles appearing in Word Ways. Comments received up to a month prior to publication of an issue will appear in that issue.
As indicated in Paul Leopold's drawing at the right, the sign reads the same to observers on both sides of the sign -- thus, only one set of neon letters, not two, is needed. The letters of this phrase have right-left symmetry, a topic explored by John McClellan in the May 1971 Word Ways. (An even longer sign having this property is IVY MOUTH WAX, a term which sounds like a brand of toothpaste; note that this uses each letter of the alphabet with right-left symmetry exactly once.)

Jules Leopold notes that words with up-down symmetry (such as CHOICE) also exist. He suggests the following parlor trick based on the message CHOICE QUALITY on the side of a pack of Camel cigarettes. To begin with, point out that everyone knows that mirrors reverse images, but few people know that cellophane also does this. Take a pack of Camels, and slide the cellophane down so that it covers CHOICE but not QUALITY; then approach a mirror with these words held upside down. Pointing to the mirror reflection, call attention to the fact that QUALITY has been reversed by the mirror, but that CHOICE, having undergone a double reversal by the mirror and the cellophane, now reads normally.

Harry Mathews of Paris, France notes that the word buttermilk is unusual in that the first part, butter, is an absent element rather than a constituent of the whole. Can Word Ways readers provide other examples? (This is the inverse of a phenomenon described in the May 1969 Word Ways, which noted that words such as taxicab consist of two synonyms; either half can be dropped without loss of meaning.)

Sir Jeremy Morse of London, England improves "The Word-Surgeon's Compendium" by noting that, if words from Chambers Twentieth Century Dictionary are allowed, one can construct a seven-letter word ladder of minimum length in which the first and last words have no letter matches in corresponding positions: MARTELS-MARTENS-MARTINS-MATTINS-MATTING-PATTING-PITTING-PITHING. Well done!

Philip Cohen notes that Ralph Beaman can replace one of the two defective words in "Primer Time", TAFE, with TAF -- reportedly a geographical entry in Lippincott's Gazetteer of 1893. Readers with access to this obsolete work may be able to give more particulars.