METHODS FOR SOLVING LETTER SERIES

Florentin Smarandache, Ph D
Associate Professor
Chair of Department of Math & Sciences
University of New Mexico
200 College Road
Gallup, NM 87301, USA
E-mail:smarand@unm.edu

Letter series problems occur in many American tests for measuring quantitative ability of supervisory personnel.

They are more difficult than number-series used for measuring mathematical ability because are unusual and complex.

According to the English alphabetic order:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

as well as to the a given sequence of letters, the equation consists of finding letters of the sequence which obey same rules.

For example, let $b d f h j \dots$ be a given sequence; find the next two letters in this series.

Of course they are l n because the letters are taken two by two from the alphabet: $b \not\in d \not\in f \not\in h \not\in j \not\in n$.

In order to solve easier letter –series we transform them into number-series, and in this case it's simpler to use some well-known mathematical procedures.

Method I.

Associate to each letter from the alphabet a number in this way:

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

Sample: d c i h n m ... becomes 14,3; 9,8; 14,13..., whence the next two numbers will be 19, 18, i.e. s r

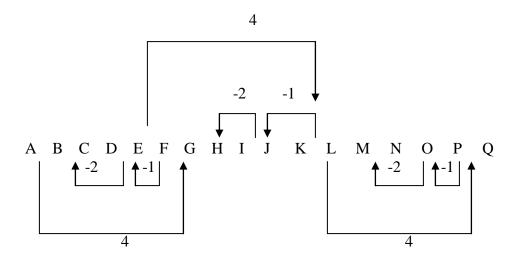
Method II.

Let $O(\Lambda)$ be the order of the letter Λ in the above succession. For example O(F)=6, O(S)=19, etc.

According to the given sequence associate the number zero (0) to its first letter, for the second one the difference between second letter's order and first letter's order,

Sample: b f e c g k j h ... becomes 0, 4, -1, -2; 4, -1, -2; ..., whence the next numbers will be 4; 4, -1, -2; equivalent to l p o m.

See the rule:



REFERENCE

Passbooks for career opportunities, computer Aptitude Test (CAT), ew York, 1983, National Learning Corporation.