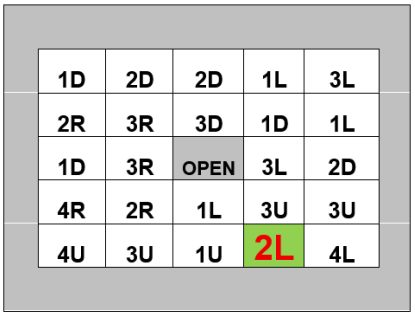
OCTOBER '26 LOGIC Solutions

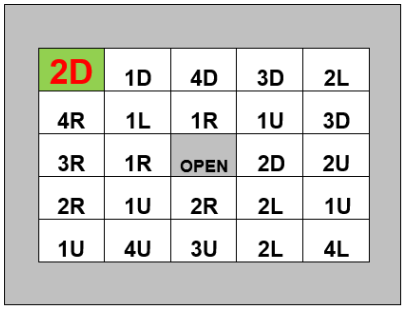
1. Safety-codes:

   To open each safe, you must enter their Safety-code in the correct order. The number on each key tells you how many squares to move, and the letters tell you in which direction (U = up, D = down, L = left or R = right). From the following safes' entry keypads, can you determine which is the first key that must be pressed in the code in order to open each safe? (Solution: The safes' first key to press is shown in red.)

   Safe A



   Safe B



2. Find the number equivalent for the following alphametic expressions to make the equations true. Each letter is unique with values from 0 to 9. (Note: There may be more than one answer.)

   a) XYZ + XYZ + XYZ = ZZZ
      185 + 185 + 185 = 555

   b) MATH + ATH + TH + H = 5000
      3965 + 965 + 65 + 5 = 5000

   c) ZERO + ONE + TWO = THREE (Given: R = 3)
      9635 + 546 + 185 = 10366 &
      9635 + 586 + 145 = 10366

   d) TWO + THREE + SEVEN = TWELVE (Given: V = 5)
      106 + 19722 + 82524 = 102352 &
      104 + 19722 + 82526 = 102352

   e) SEVEN + SEVEN + SIX = TWENTY (Given: I = 5, W = 3, and X = 0)
      68782 + 68782 + 650 = 138214

3. In the following diagram, each of the nine letters stand for a number (1 through 9, without repeats). Using the following clues, can you determine the number that represents each letter **A** through **I**?

   Clues:

   a) In one diagonal, each number is a square.
   b) **D, C** and **I** are odd numbers in ascending order.
   c) **G** is the sum of **A** and **F**.
   d) **B** is the product of **E** and **H**.
   e) One row has consecutive numbers in some order.

A	B	C
D	E	F
G	H	I

   Solution :

1	8	7
3	4	5
6	2	9