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## Multiple Surprises

M T W T F S S

Page No.:

YOUVA

Date:

1. yes, if you add any same 'No.' to a set of consecutive No. you will always get a new set of consecutive No. eg. 5, 6, 7.

$$\begin{array}{r} 5, 6, 7 \\ + 7 + 7 + 7 \\ \hline 12, 13, 14 \end{array}$$

2. If I know that a No. is a multiple of 3 I should add another multiple of 3 to get another multiple of 3 eg.:

$$\begin{array}{r} 18 \\ + 12 \\ \hline 30 \end{array}$$

3. The multiples of 2, 3 and 4 are: 12, 24, 36, 48, 60

4. I'm looking for the LCM of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

1	2	3	4	5	6	7	8	9	10
$1 \times 1$	$1 \times 2$	$1 \times 3$	$2 \times 2$	$1 \times 5$	$3 \times 2$	$1 \times 7$	$2 \times 4$	$3 \times 3$	$5 \times 2$

$$2 \times 3 \times 2 \times 7 \times 2 \times 3 \times 5 = 2520$$

A.5.

1. 1 2 3 4 5 6 7 8 9 10

2. 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530

3. 5041, 5042, 5043, 5044, 5045, 5046, 5047, 5048, 5049, 5050

4. 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570.

6. I have used LCM method because it is easier than counting. LCM works because it is the Least common multiple and if you add the LCM of a set of consecutive No. eg: 123 LCM is 6 you will get another set of consecutive No. eg: 123

$$\begin{array}{r} 123 \\ +6 \\ \hline 129 \end{array}$$

7. I can also use this to find the next set of consecutive no. from 1 to 20. I will find the LCM of 1 to 20 then I will add it to get the next set of consecutive No. since I'm using LCM, the next set won't be prime No. and will be divisible by other No.