VIDYA BHAWAN BALIKA VIDYA PITH

CLASS - 4

DATE -06.01.21

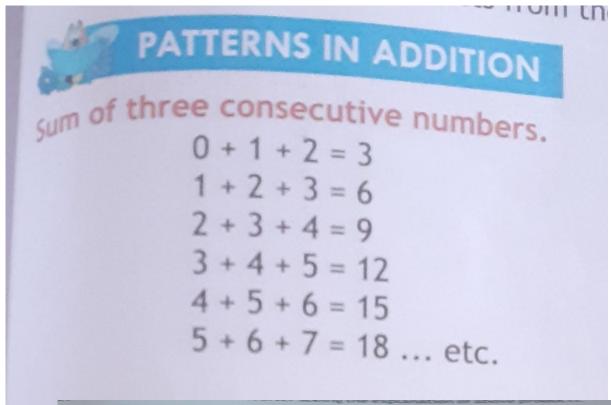
SUB-MATHS

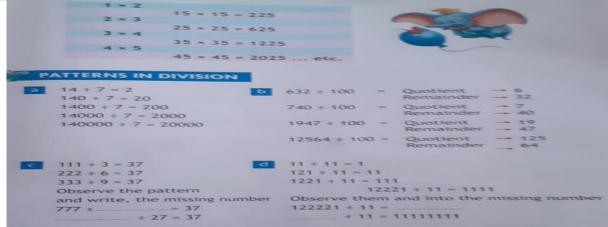
S.T-PRAGYA

BASED ON N.C.E.R.T PATTERN:-

CH - PATTERN

Read example and try to understand.





While observing the above pattern obtained by addition of 3 consecutive we get following facts:

2 × middle number = sum of extreme numbers e.g.

$$2 \times 1 = 0 + 2 = 2$$

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 $2 \times 2 = 1 + 3 = 4$

$$2 \times 3 = 2 + 4 = 6 \dots$$
 etc.

Sums are multiples of 2

$$3 \times \text{middle number} = \text{sum of the numbers e.g.}$$

$$3 \times 1 = 0 + 1 + 2 = 2$$

$$3 \times 2 = 1 + 2 + 3 = 6$$

$$3 \times 3 = 2 + 3 + 4 = 9 \dots$$
 etc. Sums are multiples of 3

Sum of four consecutive numbers.

We observe following facts from the addition of four consecutive number

(a) Sum of the middle numbers = sum of extreme numbers e.g.,

$$3 + 4 = 2 + 5 = 7 \dots$$
 etc.

- All the sums are even.
- All the sums differ by 4 if they are taken in order.

$$1 + 2 + 3 + 4 = 10$$

$$3 + 4 + 5 + 6 = 18 \dots$$
 etc.



PATTERNS IN MULTIPLICATION

We can observe following facts from the pattern. The product of two same having all the digits as 1 can be done with the help of steps given below.

- (a) Count the number of digits in the numbers to be multiplied and
- (b) Write predecessors of the digit obtained above in left and righ

The number so formed is the product.

$$15 \times 15 = 225$$

$$25 \times 25 = 625$$

$$45 \times 45 = 2025 \dots \text{ etc.}$$