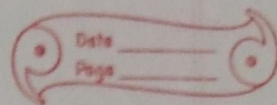


5/7/21

## Exercise - 9(B)



- ①
- ① On dividing 9 by 7, quotient = 1 and remainder = 0.
- ② On dividing 18 by 6, quotient = 3 and remainder = 0.
- ③ Factor of a number exact division of number.
- ④ Every factor number is a factor of itself.
- ⑤ Every number is a multiple of ~~one~~ itself.
- ⑥ 1 is a factor of every number.
- ⑦ For every numbers, its factors are finite and its multiples are infinite.
- ⑧  $x$  is a factor of  $y$ , then  $y$  is a multiple of  $x$ .

②

①  $16 = 1 \times 16$

$2 \times 8$

$4 \times 4$

Factors of 16 = 1, 2, 4, 8, 16.

②  $21 = 1 \times 21$

$3 \times 7$

Factors of 21 = 1, 3, 7, 21

③  $39 = 1 \times 39$

$3 \times 13$

Factors of 39 = ~~1, 3, 13, 39~~ . 1, 3, 13, 39.

④  $48 = 1 \times 48$

$2 \times 24$

$3 \times 16$

$4 \times 12$

$6 \times 8$

Factors of 48 = 1, 2, 3, 4, 6, 8, 12, 16, 24, 48.

⑤  $64 = 1 \times 64$

$2 \times 32$

$4 \times 16$

$8 \times 8$

Factors of 64 = 1, 2, 4, 8, 16, 32, 64.

(vi)  $98 = 1 \times 98$

$2 \times 49$  Factors = 1, 2, 7, 14, 49, 98.

$7 \times 14$

(3)

(i)  $4 = 4, 8, 12, 16, 20, 24$

(ii)  $9 = 9, 18, 27, 36, 45, 54$

(iii)  $11 = 11, 22, 33, 44, 55, 66$

(iv)  $15 = 15, 30, 45, 60, 75, 90$

(v)  $18 = 18, 36, 54, 72, 90, 108$

(vi)  $16 = 16, 32, 48, 64, 80, 96$

(4) Product of two numbers = 36.

Their Sum is = 13

Factors of 36 =  $1 \times 36$

$2 \times 18$

$3 \times 12$

$4 \times 9$

4 and 9 satisfied the addition of two numbers = 13. So the numbers are 4 and 9.

(5) Product of two numbers = 18

Their sum is = 16.

Factors of 18 =  $1 \times 18, 2 \times 9, 3 \times 6$

Factors of 48 =  $1 \times 48$ ,  $2 \times 24$ ,  $3 \times 16$ ,  $4 \times 12$ ;  $6 \times 8$ .

4 and 12 satisfied the addition of two number = 16. So the number is 4 and 12.

(6) Difference of two numbers = 3

Their product = 54

Factors of 54 =  $1 \times 54$ ,  $2 \times 27$ ,  $3 \times 18$ ,  $6 \times 9$

6 and 9 satisfied the difference of two numbers = 3. So the number is 6 and 9.

(7)  $7007 = 7000 + 7 = 7(1000 + 1)$

Therefore 7007 is divisible by 7.

(8)  $2300023 = 2300000 + 23 = 23(100000 + 1)$

Therefore 2300023 divisible by 23.

(9)

(i)  $11011 = 11000 + 11 = 11(1000 + 1) \Rightarrow 11011$  divisible by 11.

(ii)  $110011 = 110000 + 11 = 11(10000 + 1) \Rightarrow 110011$  divisible by 11.

(iii)  $11000011 = 11000000 + 11 = 11(1000000 + 1) \Rightarrow 11000011$  divisible by 11.

(10)

(i)  $1608 = 1600 + 8 = 8(200 + 1) \Rightarrow 1608$  divisible by 8.

(ii)  $56008 = 56000 + 8 = 8(7000 + 1) \Rightarrow 56008$  divisible by 8.

(iii)  $240008 = 240000 + 8 = 8(30000 + 1) \Rightarrow 240008$  divisible by 8.