30/6/21

Ex-9'B'

1) Fill in the blanks:

i) On dividing 9 by 7, quotient = 1 and remainder = 2.

ii) On dividing 18 by 6, quotient = 3 and remainder = 0.

iii) Factors of a number is exact divisor of the number.

iv) Every number is a factor of itself.

v) Every number is a multipe of itself.

vi) 1 is a factor of every number.

vii) For every number, its factors are finite and its multiples are infinite.

viii) x is a factor of y, then y is a multiple of x.

2) i) 16
ans) All factors of 16 are: 1, 2, 4, 8, 16

ii) 21
ans) All factors of 21 are: 1, 3, 7, 21

iii) 39
ans) All factors of 39 are: 1, 3, 13, 39

iv) 48
ans) All factors of 48 are: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48

v) 64
ans) All factors of 64 are: 1, 2, 4, 8, 16, 32, 64

98

vi) All factors of 98 are: 1, 2, 7, 14, 49, ~~98~~ 98

3) i) 4

ans) 4 X 1 = 4
4 X 2 = 8
4 X 3 = 12
4 X 4 = 16
4 X 5 = 20
4 X 6 = ~~24~~

ii) 9

ans) 9 X 1 = 9
9 X 2 = 18
9 X 3 = 27
9 X 4 = 36
9 X 5 = 45
9 X 6 = 54

iii) 11

ans) 11 X 1 = 11
11 X 2 = 22
11 X 3 = 33
11 X 4 = 44
11 X 5 = 55
11 X 6 = 66

iv) 15

ans) 15 X 1 = 15
15 X 2 = 30
15 X 3 = 45
15 X 4 = 60
15 X 5 = 75
15 X 6 = 90

v) 18

ans) 18 X 1 = 18
18 X 3 = 36
18 X 3 = 54
18 X 4 = 72
18 X 5 = 90
18 X 6 = 108

vi) 16

ans) 16 X 1 = 16
16 X 2 = 32
16 X 3 = 48
16 X 4 = 64
16 X 5 = 80
16 X 6 = 96

4th ans) Product of two numbers = 36
Sum = 13
Factors of 36 = 1, 2, 3, 4, 6, 9, 12, 18 and 36
1 X 36 = 36
2 X 18 = 36
3 X 12 = 36
(4 X 9) = 36
6 X 6 = 36
4 + 9 = 13
∴ Required no.s are 4 and 9.

5th ans) Product of two numbers = 48
Sum = 16
Factors of 48 = 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
1 X 48 = 48
2 X 24 = 48
3 X 16 = 48
(4 X 12) = 48
6 X 8 = 48
4 + 12 = 16
∴ Required no.s are 4 and 12.

6th ans) Product of two numbers = 54
Their Difference = 3
Factors of 54 = 1, 2, 3, 6, 9, 18, 27, 54
1 X 54 = 54
2 X 27 = 54
3 X 18 = 54
(6 X 9) = 54
9 - 6 = 3
∴ Required no.s are 6 and 9.

ans 7) i) $7007 = (7000+7)$
$= 7 \times 1000 + 7 \times 1$
$= 7 \times (1000+1)$
$= 7 \times 1001$
Here, 7007 is a multiple of 7.
Since, 7007 is a multiple of 7, 7007 is clearly divisible by 7.

8) ans) $2300023 = (2300000+23)$
$= 23 \times 100000 + 23 \times 1$
$= 23 \times (100001)$
$= 23 \times 100001$
Here, 2300023 is a multiple of 23.
Since, 2300023 is a multiple of 23, 2300023 is clearly divisible by 23.

9) i) ans) $11011 = (11000+11)$
$= 11 \times 1000 + 11 \times 1$
$= 11 \times (1000+1)$
$= 11 \times 1001$
Here, 11011 is a multiple of 11. So, 11011 is clearly divisible by 11.

ii) $11011 = (11000+11)$
$= 11 \times 1000 + 11 \times 1$
$= 11 \times (1000+1)$
$= 11 \times 1001$
Here, 11011 is a multiple of 11. So, 11011 is clearly divisible by 11.

iii) $1100011 = (1100000 + 11)$
$= 11 \times 100000 + 11 \times 1$
$= 11 \times (100000 + 1)$
$= 11 \times 100001$

Here, 1100011 is a multiple of 11. So, it is clearly divisible by 11.

b) i) $1608 = (1600 + 8)$
$= 8 \times 200 + 8 \times 1$
$= 8 \times (200 + 1)$
$= 8 \times 201$

As, 1608 is a multiple of 8. So, it is divisible by 8.

ii) $56008 = (56000 + 8)$
$= 8 \times 7000 + 8 \times 1$
$= 8 \times (7000 + 1)$
$= 8 \times 7001$

As, 56008 is a multiple of 8. So, it is divisible by 8.

iii) $240008 = (240000 + 8)$
$= 8 \times 30000 + 8 \times 1$
$= 8 \times (30000 + 1)$
$= 8 \times 30001$

Here, 240008 is a multiple of 8.
So, 240008 is clearly divisible by 8.