30.8.21

Ex-9.2

1. (i) On dividing 9 by 7, quotient = 1 and remainder = 2
(ii) On dividing 18 by 6, quotient = 3 and remainder = 0
(iii) Factor of a number is divisor of the given no.
(iv) Every number is a factor of itself.
(v) Every number is a multiple 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 = 1, 2, 4, 4, 8, 16
(ii) 21 = 1, 3, 7, 21
(iii) 39 = 1, 3, 13, 39
(iv) 48 = 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
(v) 64 = 1, 2, 4, 8, 8, 16, 32, 64
(vi) 98 = 1, 2, 7, 14, 49, 98

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. Factors of 36 =

1 × 36	~~36~~ 37
2 × 18	20
3 × 12	15
4 × 9	(13)
6 × 6	12

So, the required numbers are 4 and 9.

5. Factors of 48 =

1 × 48	~~49~~	4 × 12	(16)
2 × 24	26	6 × 8	14
3 × 16	19		

So, the required numbers are 4 and 12.

6. Factors of 54-

1 × 54	~~55~~	53
2 × 27	~~29~~	25
3 × 18	~~27~~	15
6 × 9		(3)

So, the required numbers are 6 and 9.

7. $7007 = 7000 + 7$
$= 7 \times (1000 + 1)$
$= 7 \times 1001$
So, 7007 is divisible by 7.

8. $2300023 = 2300000 + 23$
$= 23 \times (100000 + 1)$
$= 23 \times 100001$
So, 2300023 is divisible by 23.

9. (i) $11011 = 11000 + 11$
$= 11 \times (1000 + 1)$
$= 11 \times 1001$
So, 11011 is divisible by 11.

(ii) $110011 = 110000 + 11$
$= 11 \times (10000 + 1)$
$= 11 \times 10001$
So, 110011 is divisible by 11.

(iii) $1100011 = 1100000 + 11$
$= 11 \times (100000 + 1)$
$= 11 \times 100001$
So, 1100011 is divisible by 11.

10.(i) $1608 = 1600 + 8$

$= 8 \times (200 + 1)$

$= 8 \times 201$

So, 1608 is divisible by 8.

(ii) $56008 = 56000 + 8$

$= 8 \times (7000 + 1)$

$= 8 \times 7001$

So, 56008 is divisible by 8.

(iii) $240008 = 240000 + 8$

$= 8 \times (30000 + 1)$

$= 8 \times 30001$

So, 240008 is divisible by 8.