7.2

EXERCISE – 9 (B)

1. Fill in the blanks :

i) On dividing 9 by 7, quotient = 1 and remainder = 3.

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

iii) Factor of a number is an exact ~~division~~ divisor of the number.

iv) Every number is a factor of itself.

v) Every number is a multiple of itself.

vi) One is 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. Write all the factors of :

i) 16 – 1, 2, 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, 12, 16, 24, 48

vi) 98 – 1, 2, 7, 14, 49, 98

3. Write the first six multiples of :

i) 4

1 × 4 = 4
2 × 4 = 8
3 × 4 = 12
4 × 4 = 16
5 × 4 = 20
6 × 4 = 24

ii) 9

1 × 9 = 9
2 × 9 = 18
3 × 9 = 27
4 × 9 = 36
5 × 9 = 45
6 × 9 = 54

iii) 11

1 × 11 = 11
2 × 11 = 22
3 × 11 = 33
4 × 11 = 44
5 × 11 = 55
6 × 11 = 66

iv) 15

1 × 15 = 15
2 × 15 = 30
3 × 15 = 45
4 × 15 = 60
5 × 15 = 75
6 × 15 = 90

v) 18

$1 \times 18 = 18$
$2 \times 18 = 36$
$3 \times 18 = 54$
$4 \times 18 = 72$
$5 \times 18 = 90$
$6 \times 18 = 108$

vi) 16

$1 \times 16 = 16$
$2 \times 16 = 32$
$3 \times 16 = 48$
$4 \times 16 = 64$
$5 \times 16 = 80$
$6 \times 16 = 96$

4. The Product of two numbers is 36 and their Sum is 13. Find the numbers.

$36 = 1 \times 36$
2×18
3×12
4×9
6×6

Sum of two numbers is 13
Therefore the numbers are 4 and 9.

5. The Product of 2 numbers is 48 and their Sum is 16. Find the numbers.

$48 = 1 \times 48$
2×24
3×16
4×12
6×8

The Sum of 2 numbers is 16.
Therefore the numbers are 4 and 12.

6. Write two numbers which differ by 3 and whose product is 54.

$54 = 1 \times 54$
2×27
3×18
6×9

Differ by 3
Difference between 6 and 9 is 3.
Therefore the numbers are 6 and 9.

7. Without making any actual division show that 7007 is divisible by 7.

$7007 = 7000 + 7$
$= 7 \times (1000 + 1)$.
$= 7 \times 1001 = 7007$

7007 is divisible by 7.

8. Without making any actual division, show that 2300023 is divisible by 23.

$= 2300000 + 23$
$= 23 \times (100000 + 1)$
$= 23 \times 100001$

2300023 is divisible by 23

9. Without making any actual division, show that each of the following numbers is divisible by 11.

i) $11011 = 11000 + 11$
$= 11 \times (1000 + 1)$
$= 11 \times 1001$

11011 is divisible by 11.

ii) 110011
= 110000 + 11
= 11 × (10000 + 1)
= 11 × 10001
110011 is divisible by 11.

iii) 11000011
= 11000000 + 11
= 11 × (1000000 + 1)
= 11 × 1000001
110000 is divisible by 11.

10. Without actual division, show that each of the following numbers is divisible by 8:

i) 1608
= 1600 + 8
= 8 × (200 + 1)
= 8 × 201
1608 is divisible by 8.

ii) 56008
= 56000 + 8
= 8 × (7000 + 1)
= 8 × 7001
56008 is divisible by 8.

iii) 240008
= 240000 + 8
= 8 × (30000 + 1)
= 8 × 30001
240008 is divisible by 8.