

Ex 9B

1. Fill in the blanks:

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

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

(iii) Factor of a number is exact divⁿ of the number.

(iv) Every number is a factor of ^{son} itself.

(v) Every number is a multiple of itself.

(vi) 1 is a factor of ~~every~~ every number.

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

2. Write all the factors of:-

(i) $16 = 1, 2, 4, 8, 16$ (iii) $39 = 1, 3, 13, 39$

(ii) $21 = 1, 3, 7, 21$ (iv) $48 = 1, 2, 3, 4, 6, 8, 12, 24, 48$

(v) $64 = 1, 2, 4, 8, 16, 32, 64$
 (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. The product of two numbers is 36 and their sum is 13. Find the numbers.

$36 = 1 \times 36, 2 \times 18, 3 \times 12, 4 \times 9, 6 \times 6$

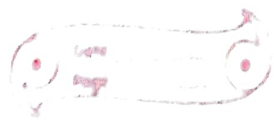
Numbers are 4 and 9 as $4 + 9 = 13$

5. The product of two numbers is 48 and their sum is 16. Find the numbers.

Ans = $48 = 2 \times 24, 3 \times 16, 4 \times 12$

4 and 12 are the numbers as $4 + 12 = 16$.

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



Ans = 54 can be written as

$$1 \times 54 = 54$$

$$2 \times 27 = 54$$

$$3 \times 18 = 54$$

$$6 \times 9 = 54$$

Difference between six and 9 is 3, so 6 and 9 are two numbers

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

$$7007 = 7000 + 7$$

$$= 7 \times (1000 + 1) = 7 \times 1001$$

clearly, 7007 is divisible by 7.

1. Fill in the blanks.

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

8. Without making any actual division, show that ~~230000~~ 2300023 is divisible by 23.

$$\begin{aligned} \text{Ans: } & 23 \times (100000) + 23 \\ & = 2300000 + 23 \\ & = 2300023 \end{aligned}$$

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

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

(iii) 11000011
 $= 11000000 + 11$
 $= 11 \times (1000000 + 1)$
 ~~$= 11000000 + 11$~~
 ~~$= 11000011$~~ 11×1000000

10. (i) $1608 = 1600 + 8$
 $= 8(200 + 1)$
 ~~$1608 = 201 \times 8$~~ $= 8 \times 201$ So 1608 is divisible by 8.

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

(iii) 240008
 $240008 = 3001 \times 8 = 8(3000 + 1)$
 $= 8 \times 3001$