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) factor of a number is exact divisor of that 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, 24, 48, 16
v) 64 : 1, 2, 4, 8, 16, 32, 64
vi) 98 : 1, 2, 7, 14, 49, 98.

3) Write first six multiples of:

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 can be written as

1x36 = 36, 2x18 = 36, 3x12 = 36, 4x9 = 36, 6x6 = 36

Here, the sum of 4 and 9 is 13
Hence, 4 and 9 are the two numbers

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

ans 48 can be written as
$1 \times 48 = 48, 2 \times 24 = 48, 3 \times 16 = 48, 4 \times 12 = 48, 6 \times 8 = 48$
Here, the sum of 4 and 12 is 16
Hence, 4 and 12 are the two numbers.

6) Write two numbers which differ by 3 and whose product is 54.
Ans: 54. can be written as $= 1 \times 54 = 54, 2 \times 27 = 54, 3 \times 18 = 54,$
$6 \times 9 = 54$, is
Here the product of 6 and 9 is 54 and $9 - 6 = 3$.
So, 6 and 9 are the numbers.

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

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

$\Rightarrow$

so, clearly 7007 is divisible by 7

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

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

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

i) $11011 = 11000 + 11$
$= 11 \times (1000 \times 11) = 11 \times 10001$

iii) ~~100011 = 110011 = 11 × (100000 × 11)~~
~~= 11 × 100001~~

~~iii) 110011 =~~

i) 11011 = 11000 + 11
= 11 × (100 + 1)
= 11 × 101
clearly, 101 is divisible by 11.

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

iii) 1100011 = 1100000 + 11
= 11 × (100000 + 1)
= 11 × 100001
clearly 1100011 is divisible by 11

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

i) 1608 = 1600 + 8
= ~~16 × (100 + 8)~~ = 8 × (200 + 1)
= ~~16 × 100 + 8~~ 8 × 201
clearly, 1608 is divisible by 8.

ii) 56008 = 56000 + 8
= 8 × ~~(7000 + 1)~~ (7000 + 1)
= 8 × 7001
clearly, 56008 is divisible by 8

(iii) $240008 = 240000 + 8$

$= 8 \times (30000 + 1)$

$= 8 \times 30001$

Clearly, 240008 is divisible by 8.

PDF Created Using

Camera Scanner

Easily Scan documents & Generate PDF

https://play.google.com/store/apps/details?id=photo.pdf.maker