

Worksheet-13 Subject: - Mathematics Class: - VI Teacher: - Mrs. Poonam Sunil

Name: _____ Class & Sec: _____ Roll No. _____ Date: 15.05.2020

Good morning Students! (First listen to audio message then write) In the previous class I have explained you about factor. Today I will talk about factor and multiples. We can say that a number is a multiple of each of its factor. (Note down now)

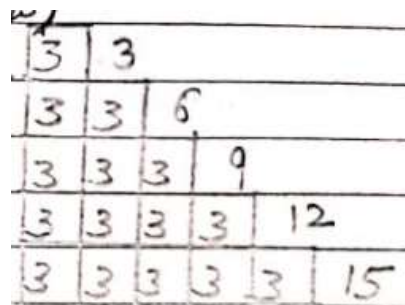
The length of the strip at the top is $3 = 1 \times 3$ units, the length of the strip below it is $3 + 3 = 6$ units.

We say that the numbers 3, 6, 9, 12, 15 are multiples of 3

Multiples of a number is greater than or equal to the number.

Let us conclude about factors and multiples

1. 1 is a factor of every number.
2. Every number is a factor of itself.
3. Every factor of a number is an exact divisor of that number.
4. Every factor is less than or equal to the given number.
5. Number of factors of a given number are finite.
6. Every multiple of a number is greater than or equal to that number.
7. The number of multiples of a given number is infinite.
8. Every number is a multiple of itself.



Example 1: Write all the factors of 68

Solution: We note that $68 = 1 \times 68$

$$68 = 2 \times 34$$

$$68 = 4 \times 17$$

Factors of 68 are 1, 2, 4, 17, 34, and 68

Example 2: Find the factors of 36

Solution: $36 = 1 \times 36$

$$36 = 2 \times 18$$

$$36 = 3 \times 12$$

$$36 = 4 \times 9$$

$$36 = 6 \times 6$$

All the factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, and 36

Example 3: Write first five multiples of 6

Solutions: $6 \times 1 = 6$, $6 \times 2 = 12$, $6 \times 3 = 18$, $6 \times 4 = 24$, $6 \times 5 = 30$

Multiples of 6 are 6, 12, 18, 24 and 30

Q1: Write all the factors of the following numbers.

a) 24

$$24 = 1 \times 24$$

$$24 = 2 \times 12$$

$$24 = 3 \times 8$$

$$24 = 4 \times 6$$

Factors of 24 are 1, 2, 3, 4, 6, 8, 12 and 24.

b) 15

$$15 = 1 \times 15$$

$$15 = 3 \times 5$$

Factors of 15 are 1, 3, 5 and 15

c) 21

$$21 = 1 \times 21$$

$$21 = 3 \times 7$$

Factors of 21 are 1, 3, 7 and 21

d) 27

$$27 = 1 \times 27$$

$$27 = 3 \times 9$$

Factors of 27 are 1, 3, 9 and 27

e) 12

$$12 = 1 \times 12$$

$$12 = 2 \times 6$$

$$12 = 3 \times 4$$

Factors of 12 are 1, 2, 3, 4, 6 and 12

f) 20

$$20 = 1 \times 20$$

$$20 = 2 \times 10$$

$$20 = 4 \times 5$$

Factors of 20 are 1, 2, 4

5, 10 and 20

g) 18

$$18 = 1 \times 18$$

$$18 = 2 \times 9$$

$$18 = 3 \times 6$$

Factors of 18 are 1, 2, 3, 6, 9 and 18

h) 23

$$23 = 1 \times 23$$

Factors of 23 are 1 and 23

i) 36

$$36 = 1 \times 36$$

$$36 = 2 \times 18$$

$$36 = 3 \times 12$$

$$36 = 4 \times 9$$

$$36 = 6 \times 6$$

Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18 and 36

Q2: Write first five multiples of:

a) 5

b) 8

c) 9

Solution:

a) First five multiples of 5 are 5, 10, 15, 20 and 25

b) First five multiples of 8 are 8, 16, 24, 32 and 40

c) First five multiples of 9 are 9, 18, 27, 36 and 45

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Today's class is over. Next I will meet you on Tuesday. I hope you understood factors and multiples. Good Bye Children! (Stay Fit and Stay Healthy) We love you children.