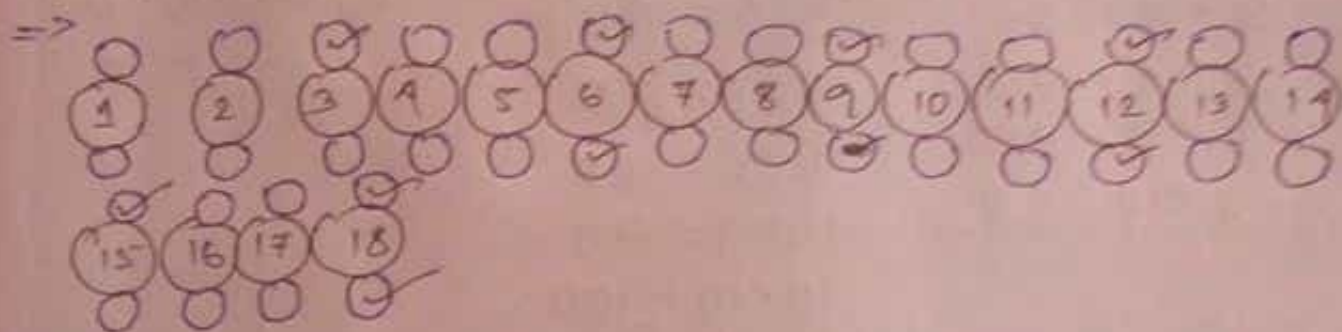


Exercise - 5.2

A) Look at the numbers given below, If it is a multiple of 3, tick (✓) the circle above it. If it is a multiple of 6, tick (✓) the circle below it. Now write the common multiples of 3 and 6.



The common multiple of 12 and 18.

B) Write the first ten multiples of the following pairs of numbers to find their common multiples.

⇒ ① 2, 3

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

$$3 \times 1 = 3$$

$$3 \times 2 = 6$$

$$3 \times 3 = 9$$

$$3 \times 4 = 12$$

$$3 \times 5 = 15$$

$$3 \times 6 = 18$$

$$3 \times 7 = 21$$

$$3 \times 8 = 24$$

$$3 \times 9 = 27$$

$$3 \times 10 = 30$$

The common multiples

of 2 and 3 are

6, 12, 18

2) 5, 10

$$5 \times 1 = 5$$

$$\underline{5 \times 2 = 10}$$

$$5 \times 3 = 15$$

$$\underline{5 \times 4 = 20}$$

$$5 \times 5 = 25$$

$$\underline{5 \times 6 = 30}$$

$$5 \times 7 = 35$$

$$\underline{5 \times 8 = 40}$$

$$5 \times 9 = 45$$

$$\underline{5 \times 10 = 50}$$

$$\underline{10 \times 1 = 10}$$

$$10 \times 2 = 20$$

$$\underline{10 \times 3 = 30}$$

$$10 \times 4 = 40$$

$$\underline{10 \times 5 = 50}$$

$$10 \times 6 = 60$$

$$10 \times 7 = 70$$

$$10 \times 8 = 80$$

$$10 \times 9 = 90$$

$$10 \times 10 = 100$$

Ans:— The common multiples of 5, 10 are
10, 20, 30, 40, 50

3) 4, 6

$$\Rightarrow 4 \times 1 = 4$$

$$4 \times 2 = 8$$

$$\underline{4 \times 3 = 12}$$

$$4 \times 4 = 16$$

$$4 \times 5 = 20$$

$$\underline{4 \times 6 = 24}$$

$$4 \times 7 = 28$$

$$4 \times 8 = 32$$

$$\underline{4 \times 9 = 36}$$

$$4 \times 10 = 40$$

$$6 \times 1 = 6$$

$$\underline{6 \times 2 = 12}$$

$$6 \times 3 = 18$$

$$\underline{6 \times 4 = 24}$$

$$6 \times 5 = 30$$

$$\underline{6 \times 6 = 36}$$

$$6 \times 7 = 42$$

$$6 \times 8 = 48$$

$$6 \times 9 = 54$$

$$6 \times 10 = 60$$

Ans:— The common multiple of 4, 6
12, 24, 36

4) 3, 9

$$\Rightarrow 3 \times 1 = 3$$

$$3 \times 2 = 6$$

$$\underline{3 \times 3 = 9}$$

$$3 \times 4 = 12$$

$$3 \times 5 = 15$$

$$\underline{3 \times 6 = 18}$$

$$3 \times 7 = 21$$

$$3 \times 8 = 24$$

$$\underline{3 \times 9 = 27}$$

$$3 \times 10 = 30$$

$$\underline{9 \times 1 = 9}$$

$$\underline{9 \times 2 = 18}$$

$$\underline{9 \times 3 = 27}$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

$$9 \times 10 = 90$$

Ans: The common multiples of 3, 9 are 9, 18, 27.

5) 7, 8

$$\Rightarrow 7 \times 1 = 7$$

$$7 \times 2 = 14$$

$$7 \times 3 = 21$$

$$7 \times 4 = 28$$

$$7 \times 5 = 35$$

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

$$\underline{7 \times 8 = 56}$$

$$7 \times 9 = 63$$

$$7 \times 10 = 70$$

$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

$$8 \times 5 = 40$$

$$8 \times 6 = 48$$

$$\underline{8 \times 7 = 56}$$

$$8 \times 8 = 64$$

$$8 \times 9 = 72$$

$$8 \times 10 = 80$$

Ans: The common multiples of 7, 8 are 56.

Factors

When two or more numbers are multiplied the answer is called the product.

Each of the numbers being multiplied is called the factor of the product.

$$3 \times 7 = 21, \quad 3 \text{ \& \ } 7 \text{ are factors of } 21.$$

(3 and 7 are indicated as factors of 21 with arrows pointing to them)

Mental Maths:-

Write T for true or F for false in

- 1) 5 and 3 are factors of 15 (T)
- 2) 2 and 4 are factors of 24 (T)
- 3) 7 and 5 are factors of 35 (T)
- 4) 8 and 9 are factors of 98 (F)

Properties of factors:-

- 1) 1 is a factor of all numbers.
- 2) 1 is the smallest factor of a number.
- 3) A number is a factor of itself.
- 4) A number itself is the greatest factor of itself.
- 5) The factor of a number is smaller than or equal to the number.

* Every number (except 1) has at least two factors, 1 and itself.

Fill in the blanks:-

1) $4 \times 8 = 32$. Therefore 4 and 8 are factors of 32.

2) $6 \times 7 = 42$. Therefore the factors of 42 are 6 and 7.

3) $13 \times 7 = 91$, Therefore 13 and 17 are factors of 91.

4) The smallest factor of 12 is 1.

5) 2 is a factor of all even (even/odd) numbers.

6) 1 is the factor of all numbers.

7) 27 is the biggest factor of 27.

8) 1 has only one factor.