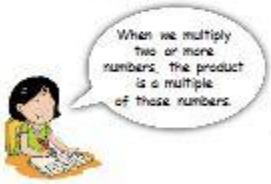
3 MULTIPLES AND FACTORS

A. Look at the table and answer the following questions in your notebook. ANS

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

1. Circle the first 8 multiples of 3. Tick the first 8 multiples of 6.
2. Cross out the common multiples of 3 and 6.
3. Is 56 a common multiple of 7 and 8?
4. Is 75 a common multiple of 5 and 10?

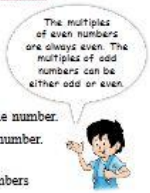


B. Type the missing factor. ANS

1. $3 \times \_\_\_\_ = 24$
2. $7 \times \_\_\_\_ = 63$
3. $8 \times \_\_\_\_ = 48$
4. $\_\_\_\_ \times 6 = 54$
5. $\_\_\_\_ \times 3 = 27$
6. $\_\_\_\_ \times 7 = 49$

UNDERSTANDING MULTIPLES

Properties of multiples



- Every number is a multiple of 1 and a multiple of itself.
- The smallest (first) multiple of a number is the number itself.
- Every multiple of a number is equal to or greater than the number.
- There is no end to the multiples that you can form of a number. Thus, there is no greatest multiple of a number.
- The multiples of 2 are called **even numbers** and the numbers that are not multiples of 2 are called **odd numbers**.

Finding multiples

To find the multiples of a number, multiply it by 1, 2, 3, 4 and so on.

EXAMPLE 1 Find the first five multiples of 7.

$7 \times 1 = 7$
$7 \times 2 = 14$
$7 \times 3 = 21$
$7 \times 4 = 28$
$7 \times 5 = 35$

ANS. The first five multiples of 7 are 7, 14, 21, 28 and 35.

EXAMPLE 2 Find the first five multiples of 8.

$8 \times 1 = 8$
$8 \times 2 = 16$
$8 \times 3 = 24$
$8 \times 4 = 32$
$8 \times 5 = 40$

ANS. The first five multiples of 8 are 8, 16, 24, 32 and 40.

UNDERSTANDING FACTORS

Properties of factors

- 1 is a factor of all numbers.
- 1 is the smallest factor of a number.
- A number is a factor of itself.
- A number is the greatest factor of itself.
- The factor of a number is smaller than or equal to the number.
- Every number has at least two factors, that is, 1 and the number itself. The number 1 is an exception.

Finding factors

EXAMPLE 3 Is 3 a factor of 36?

$$\begin{array}{r} 12 \\ 3\overline{)36} \\ -3\downarrow \\ \hline 6 \\ -6 \\ \hline 0 \end{array}$$

ANS. Yes, 3 is a factor of 36.

EXAMPLE 4 Write all the factors of 12.

FACTORS OF 12
1×12 ↑
2×6
↓ 3×4

ANS. The factors of 12 are 1, 2, 3, 4, 6 and 12.

I Can Do It!

A. Fill in the blanks. ANS

1. _____ is a factor of all numbers.
2. 2 is a factor of all _____ numbers.
3. The smallest multiple of 14 is _____.
4. 6 is a factor of 18 as 18 can be divided by _____ exactly.
5. All numbers except 1 have at least _____ factors.

B. List all the factors of each of the following. ANS

1. 18
2. 28
3. 36
4. 21
5. 35

DIVISIBILITY RULES

Divisibility rules help you find if a number is completely divisible by another number without actually dividing.
For example,

$$\begin{array}{r} 9 \\ 2\overline{)18} \\ -18 \\ \hline 0 \end{array} \qquad \begin{array}{r} 5 \\ 5\overline{)26} \\ -25 \\ \hline 1 \end{array}$$

Without actually dividing 18 by 2 or 26 by 5, we can check their divisibility by using the following divisibility rules.

Divisibility by 2, 5 and 10

A number is divisible by	If the last digit is	Examples
2	0, 2, 4, 6 or 8	10, 22, 34, 46 and 58 are divisible by 2.
5	0 or 5	20 and 35 are divisible by 5.
10	0	30 and 40 are divisible by 10.

Divisibility by 3 and 9

A number is divisible by	If the sum of its digits is divisible by	Examples
3	3	48 is divisible by 3 (4 + 8 = 12, divisible by 3).
9	9	63 is divisible by 9 (6 + 3 = 9, divisible by 9).

Exercise 3.1

A. Find the first five multiples of the following. ANS

1. 9 2. 11 3. 13 4. 19 5. 21 6. 25

B. Put a tick (✓) if the number is divisible. ANS

TABLE A

	Number	Last digit	Divisible by 2	Divisible by 5	Divisible by 10
1.	12	3	✓	✗	✗
2.	36				
3.	45				
4.	275				
5.	990				

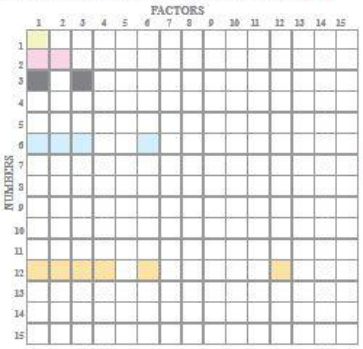
TABLE B

	Number	Sum of digits	Divisible by 3	Divisible by 9
1.	12	3	✓	✗
2.	40			
3.	126			
4.	612			
5.	999			

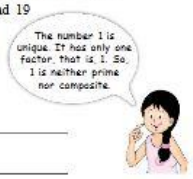
PRIME AND COMPOSITE NUMBERS

Sachin has written all the factors of the numbers from 1 to 15 in the table on the left. Help him colour the boxes to show the factors in the number grid on the right. ANS

Number	Factors
1	1
2	1, 2
3	1, 3
4	1, 2, 4
5	1, 5
6	1, 2, 3, 6
7	1, 7
8	1, 2, 4, 8
9	1, 3, 9
10	1, 2, 5, 10
11	1, 11
12	1, 2, 3, 4, 6, 12
13	1, 13
14	1, 2, 7, 14
15	1, 3, 5, 15



Numbers with only two factors, that is, 1 and the number itself are called **prime numbers**. For example, 2, 3, 5, 7, 11, 13, 17 and 19 are prime numbers between 1 and 20. Numbers with three or more factors are called **composite numbers**. For example, 4, 6, 8, 9, 10, 12, 14, 15, 16 and 18 are composite numbers between 1 and 20. ANS



- Type the numbers between 5 and 15 that have only 2 factors. _____
- Type the numbers between 10 and 15 that have 3 or more factors. _____

Prime numbers between 1 and 100

About 230 BCE, a Greek mathematician named Eratosthenes developed a method of finding prime numbers. This method is called the **Sieve of Eratosthenes**.

Look at this number grid.

- Cross out 1 as it is not a prime number.
- Leave 2 as it is prime. Cross out all the other multiples of 2.
- Leave 3 as it is prime. Cross out all the other multiples of 3.
- Leave 5. Cross out all the other multiples of 5.
- Leave 7. Cross out all the other multiples of 7.
- Circle all the numbers which are not crossed out.
- Find out how many numbers are circled.

~~1~~	(2)	(3)	~~4~~	(5)	~~6~~	(7)	~~8~~	~~9~~	~~10~~
(11)	~~12~~	(13)	~~14~~	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

In all 25 numbers are circled. These are prime numbers. The prime numbers in the first row are 2, 3, 5 and 7. All the numbers that are crossed out are the composite numbers.

I Can Do It!

A. List the prime numbers in each row of the number grid given above in your notebook. ANS

B. Use the number grid given above to fill in the blanks. ANS

1. 1 has only one
2. The smallest prime number after 40 is _____
3. The smallest odd composite number is _____
4. The greatest prime number before 30 is _____
5. Seven consecutive composite numbers are _____
6. There are _____ prime numbers between 1 and 100.
7. _____ and _____ are two consecutive prime numbers.

More about prime numbers

Every even composite number can be expressed as the sum of two prime numbers.

Even composite number	Sum of two prime numbers
4	2 + 2
8	5 + 3

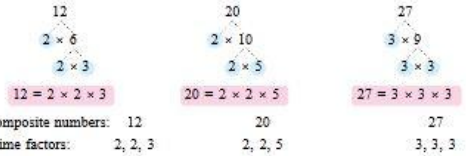
I Can Do It!

Express the following even composite numbers as the sum of two prime numbers. ANS

1. 10 = ◯ + ◯
2. 12 = ◯ + ◯
3. 14 = ◯ + ◯
4. 28 = ◯ + ◯

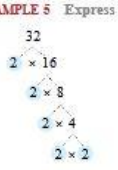
PRIME FACTORIZATION

All composite numbers can be expressed as a product of their prime factors.



Composite numbers:	12	20	27
Prime factors:	2, 2, 3	2, 2, 5	3, 3, 3

EXAMPLE 5 Express 32 as the product of prime factors.



Step 1 Divide 32 beginning with the smallest prime factor of 32, that is, 2.

Step 2 Next find the smallest prime factor of 16 and divide 16 by it.

Step 3 Continue dividing by the smallest prime factor in every step.

Step 4 Stop when you get only prime numbers.

ANS. 32 = 2 × 2 × 2 × 2 × 2

EXAMPLE 6 Find the prime factors of 45.

$45 = 3 \times 15$
$= 3 \times 3 \times 5$

ANS. $45 = 3 \times 3 \times 5$

Quick TIP

For an odd number, use the divisibility test of 3 and 5. If neither 3 nor 5 is a factor, try with 7 or 11.

Exercise 3.2

Click to find the prime factors by the prime factorization method. ANS

1. 42	2. 24	3. 36	4. 50	5. 63	6. 91
7. 62	8. 81	9. 84	10. 65	11. 56	12. 87

HIGHEST COMMON FACTOR (HCF)

The highest common factor (HCF) of two or more numbers is the greatest of their common factors.

Properties of HCF

- The HCF of two or more numbers exactly divides the numbers.
- The HCF of given numbers cannot be greater than the numbers themselves.
- If one number is a factor of another number, the smaller number is the HCF of the two numbers. For example, in the case of 9 and 27, 9 is a factor of 27. So, the HCF of 9 and 27 is 9.
- If the HCF of two numbers is 1, they are called **coprime numbers** or **coprimes**. For example, the HCF of 16 and 25 is 1. So, 16 and 25 are coprimes.
- Consecutive numbers are always coprime. For example, 4 and 5 are coprime numbers and so are 9 and 10.

Understanding HCF

EXAMPLE 7 Find the HCF of 12 and 18.

The factors of 12 are 1, 2, 3, 4, 6 and 12.
The factors of 18 are 1, 2, 3, 6, 9 and 18.

Factors of 12 : 1 2 3 4 6 12
Factors of 18 : 1 2 3 6 9 18

common factors of 12 and 18

The common factors of 12 and 18 are 1, 2, 3 and 6.
The **highest common factor (HCF)** of 12 and 18 is 6.

Check if both 12 and 18 are divisible by 6.

$$\begin{array}{r} 2 \\ 6\overline{)12} \\ -12 \\ \hline 0 \end{array} \qquad \begin{array}{r} 3 \\ 6\overline{)18} \\ -18 \\ \hline 0 \end{array}$$

12 and 18 are completely divisible by 6.

ANS. The HCF of 12 and 18 is 6.

Finding HCF

Factor method

EXAMPLE 8 Find the HCF of 8, 16 and 20 by the factor method.

FACTORS OF 8	FACTORS OF 16	FACTORS OF 20
1 × 8 ↑	1 × 16 ↑	1 × 20 ↑
2 × 4	2 × 8	2 × 10
↓	↓ 4 × 4	↓ 4 × 5

Factors of 8 = 1, 2, 4, 8
Factors of 16 = 1, 2, 4, 8, 16
Factors of 20 = 1, 2, 4, 5, 10, 20
Common factors = 1, 2, 4
HCF = 4

ANS. The HCF of 8, 16 and 20 is 4.

Get It Right!

HCF of 16 and 24
$16 = 2 \times 2 \times 2 \times 2$
$24 = 2 \times 2 \times 2 \times 3$

HCF = 2 ✗
HCF = 2 × 2 × 2 = 8 ✓

The HCF of two numbers is the greatest of their common factors.

Prime factorization method

EXAMPLE 9 Find the HCF of 18, 27 and 33 by the prime factorization method.

Let us find the prime factors of each number.

$18 = 2 \times 9 = 2 \times 3 \times 3$
$27 = 3 \times 9 = 3 \times 3 \times 3$
$33 = 3 \times 11 = 3 \times 11$
HCF = 3

ANS. The HCF of 18, 27 and 33 is 3.

Quick TIP

The HCF cannot be bigger than any one of the numbers.

Long division method

EXAMPLE 10 Find the HCF of 35 and 49 by the long division method.

```
35 ) 49 ( 1
   - 35
    14 ) 35 ( 2
       - 28
         7 ) 14 ( 2
           - 14
             0
```

Step 1 Divide the bigger number (49) by the smaller number (35).

Step 2 The remainder (14) becomes the new divisor, and the previous divisor (35) becomes the new dividend. Divide again.

Step 3 Continue till you get the remainder 0.

Step 4 The last divisor (7) is the HCF.

ANS. The HCF of 35 and 49 is 7.

Exercise 3.3

A. Find the HCF by finding all the factors. ANS

1. 15, 30
2. 24, 32, 56
3. 27, 54
4. 64, 74, 84
5. 28, 36
6. 20, 50, 90
7. 36, 48, 96
8. 45, 65, 75
9. 31, 37, 33
10. 99, 33

B. Find the HCF by the prime factorization method. ANS

1. 10, 16
2. 15, 45
3. 27, 30
4. 28, 56
5. 19, 20
6. 60, 100
7. 30, 45, 75
8. 12, 25, 36
9. 14, 35, 49
10. 18, 64, 80

C. Find the HCF by the long division method. ANS

1. 16, 20
2. 48, 68
3. 35, 95
4. 98, 78
5. 65, 135

STORY SUMS

EXAMPLE 11 Two buckets contain 15 litres and 25 litres of water. Find the maximum capacity of a mug that can exactly measure the water in both the buckets.

The maximum capacity of a mug will be the HCF of 15 and 25.

$15 = 3 \times 5$

$25 = 5 \times 5$

So, the HCF of 15 and 25 is 5.

ANS. The maximum capacity of the mug is 5 litres.

Exercise 3.4

Solve these story sums. ANS

1. Pawan wants to plant 48 onion plants and 32 cabbage plants in his vegetable garden. What is the greatest number of rows possible if each row has the same number of onion plants and cabbage plants?
2. Sanjay has 15 toffees, Raj has 20 toffees and Sanjana has 25 toffees. Each of them wants to make packets of toffees so that there are an equal number of toffees in each packet with no toffee left behind. How many maximum toffees should be there in each packet? (HINT: Find the HCF of 15, 20 and 25.)

HOTS Questions

Shilpi had ₹5, Pearl had ₹8 and Monika had ₹11. They went to a stationery shop and bought an equal number of pencils so that each of them was left with ₹2. ANS

1. What is the greatest number of pencils each of them could have bought? (HINT: Subtract 2 from each amount and find the HCF.)
2. Who bought pencils that cost the most? _____
3. Who bought pencils that cost the least? _____

LOWEST COMMON MULTIPLE (LCM)

The lowest common multiple (LCM) of two or more numbers is the smallest of their common multiples.

Properties of LCM

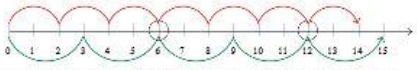
- The LCM of two or more numbers is the smallest number that is completely divisible by each of the numbers. For example, the LCM of 8 and 6 is 24. 24 is completely divisible by 8 and 6.

```
   3                4
8 ) 24           6 ) 24
  - 24             - 24
    0                0
```

- The LCM of two or more numbers cannot be less than the numbers themselves.
- If one number is a factor of the other, the greater number is the LCM. For example, in the case of 9 and 27, 9 is a factor of 27. So, the LCM of 9 and 27 is 27.
- The LCM of coprime numbers is their product. For example, the LCM of 4 and 7 is 28.

Understanding LCM

Let us see the multiples of 2 and 3 on the number line.



Multiples of 2: 2, 4, **6**, 8, 10, **12**, 14,...
Multiples of 3: 3, **6**, 9, **12**, 15,...
Common multiples of 2 and 3 are **6**, **12**,...

Among the common multiples, the smallest multiple is 6.
The lowest common multiple (LCM) of 2 and 3 is 6.

Finding LCM

Prime factorization method

EXAMPLE 12 Find the LCM of 28 and 30 by the prime factorization method.

$28 = 2 \times 14 = 2 \times 2 \times 7$ | $30 = 2 \times 15 = 2 \times 3 \times 5$

Step 1 Write the prime factors of 28 and 30.

$28 = \mathbf{2} \times 2 \times 7$
$30 = \mathbf{2} \times 3 \times 5$

Step 2 Circle the common factors.

Step 3 Multiply the common factors (only once) and the factors that are not common.

LCM = $2 \times 2 \times 3 \times 5 \times 7 = 420$

ANS. The LCM of 28 and 30 is 420.

EXAMPLE 13 Find the LCM of 10, 15 and 18 by the prime factorization method.

$10 = 2 \times 5$ | $15 = 3 \times 5$ | $18 = 2 \times 9 = 2 \times 3 \times 3$

$10 = 2 \times 5$
$15 = 5 \times 3$
$18 = 2 \times 3 \times 3$
LCM = $2 \times 5 \times 3 \times 3 = 90$

ANS. The LCM of 10, 15 and 18 is 90.

Short division method

This is a quicker method for finding LCM.

EXAMPLE 14 Find the LCM of 8 and 12.

2	**8**	**12**
2	**4**	**6**
2	**2**	**3**
3	**1**	**3**
	1	1

Step 1 Divide the numbers by their smallest common prime factor and write the quotient below them. If a number cannot be divided exactly, copy the number.

Step 2 Continue dividing by common prime factors writing the quotient below each number.

Step 3 Stop when there is no common prime factor.

LCM = $2 \times 2 \times 2 \times 3 = 24$

ANS. The LCM of 8 and 12 is 24.

EXAMPLE 15 Find the LCM of 21, 14 and 42.

2	21	14	42
3	21	7	21
7	7	7	7
	1	1	1

LCM = $2 \times 3 \times 7 = 42$

ANS. The LCM of 42.

EXAMPLE 16 Find the LCM of 10, 15 and 18.

2	10	15	18
3	5	15	9
3	5	5	3
5	5	5	1
	1	1	1

LCM = $2 \times 3 \times 3 \times 5 = 90$

ANS. The LCM is 90.

Maths Online

For more practice on multiples and factors, visit rsgr.in/lm5-2

Exercise 3.5

A. Find the LCM by the prime factorization method. ANS

1. 24, 36
2. 42, 70
3. 18, 27
4. 12, 15
5. 40, 32
6. 15, 25, 30
7. 12, 15, 40
8. 10, 15, 20
9. 20, 30, 50
10. 33, 22, 11

B. Find the LCM by the short division method. ANS

1. 30, 55
2. 42, 70
3. 9, 27
4. 12, 20
5. 20, 65
6. 72, 32
7. 10, 15, 25
8. 14, 16, 8
9. 27, 54, 63
10. 21, 14, 35

STORY SUMS

EXAMPLE 17 What is the least number of children that can be arranged in rows of 10, 15 or 25 children in each row?

The least number of children that can be arranged in rows will be the LCM of 10, 15 and 25.

2	10	15	25
3	5	15	25
5	5	5	25
5	1	1	5
	1	1	1

LCM = 2 × 3 × 5 × 5 = 150

ANS. The least number of children that can be arranged in rows is 150.

Exercise 3.6

Solve these story sums. ANS

1. Find the least number of people that can be arranged in groups of 3, 4, 6 or 8 with none left behind.

2. Mala and Gopi have brought clothes to distribute in an Old-age Home. The residents there are divided into 2 groups: A and B. There are 10 people in group A and 15 in group B. If each group is given an equal number of clothes, and every member of a group receives the same number of clothes, what is the least number of clothes that Mala and Gopi must have brought?
3. Raju, Rahim and Richard visit an Old-age Home every Sunday. The rooms in the Home are numbered from 150 to 200. Raju visits rooms with numbers that are multiples of 3. Rahim visits rooms with numbers that are multiples of 5. Richard visits all the rooms. Which rooms do all three of them visit?

RELATIONSHIP BETWEEN HCF AND LCM

The product of two numbers is equal to the product of their HCF and LCM. For example, let us take two numbers 12 and 15.

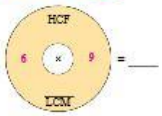
= 180

= 180

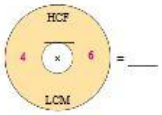
Product of 12 and 15 = 12 × 15 = 180
HCF of 12 and 15 = 3
LCM of 12 and 15 = 60
Product of HCF and LCM = 3 × 60 = 180

Exercise 3.7

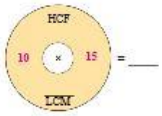
Fill in the blanks. ANS

1. 

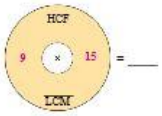
= ____ = ____

2. 

= ____ = ____

3. 

= ____ = ____

4. 

= ____ = ____

HOTS Questions

Dev has some marbles. If he makes groups of 3 each, he is left with 1 marble. If he makes groups of 5 each, he is again left with 1 marble. If he makes groups of 7 each, he is again left with 1 marble. ANS

How many marbles does he have? _____

(HINT : Find the LCM of 3, 5 and 7 and add 1 to it.)

Maths Lab Activity

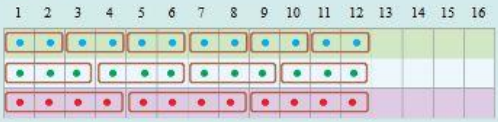
Aim: To find the lowest common multiple (LCM)

You will need: Square-lined paper and bindis of three colours (blue, red and green)

Preparation: Work in groups of three each.

Steps

1. The teacher will assign each group a set of numbers, such as: 2, 3 and 4; 3, 5 and 7; 2, 3 and 6, and so on.
2. Each group makes a grid of 3 rows. Number them as shown.
3. The first student pastes a set of 2 blue bindis in the top row. The second student pastes a set of 3 green bindis in the middle row. The third student pastes a set of 4 red bindis in the bottom row.
4. The students continue to paste sets of bindis till they line up vertically in all the three rows.



5. Note the number. It is the LCM of the three numbers.
   In this case, the three rows first meet at 12.
   So, the LCM of 2, 3 and 4 is 12.

Life Skills

Anju and Manju have joined a Hip-Hop dance class. For practice, the teacher has asked the class of 30 students to form groups of 3 or more so that no student is left out. A group cannot have more than 10 students. How many such groups can be formed? ANS

Mental Maths

A. Think and answer. ANS

1. The smallest prime number _____
2. The smallest multiple of 13 _____
3. The greatest factor of 48
4. The third multiple of 7 _____
5. The HCF of 9 and 10 _____
6. The LCM of 9 and 10
7. The number that is neither prime nor composite _____
8. The smallest composite number _____
9. One-digit number that is a factor of 20 and a multiple of 5 _____
10. The factors of 25 _____

B. What number am I? ANS

1. I am a number between 330 and 340. I am divisible by 5. I am _____
2. I am a number between 80 and 90. I am divisible by both 2 and 3. I am _____
3. I am a multiple of 7 less than 50. When my digits are reversed, I am a multiple of 8. I am
4. I am the only even prime number. I am _____
5. I am the HCF of any two consecutive numbers. I am _____

C. Type True or False. ANS

1. 1 is a multiple of every number.
2. The prime factorization of 27 is 3 × 9. _____
3. The largest 2-digit multiple of 9 is 99. _____
4. 8 is a factor of 12, but not a multiple of 4.
5. The greatest composite number less than 50 is 49. _____

Worksheet

A. Tick (✓) the correct option. ANS

1. What is the sum of the first five multiples of 2?
   a. 20 ☐ b. 25 ☐ c. 28 ☐ d. 30 ☐
2. What are the common factors of 9 and 15?
   a. 1, 3, 5, 9 ☐ b. 3, 9, 15 ☐ c. 1, 3, 5 ☐ d. 1, 3 ☐
3. Which of the following are six consecutive composite numbers less than 100?
   a. 91, 92, 93, 94, 95, 96 ☐ b. 67, 68, 69, 70, 71, 72 ☐
   c. 51, 52, 53, 54, 55, 56 ☐ d. 81, 82, 83, 84, 85, 86 ☐
4. Which of the following are coprime numbers?
   a. 21, 35 ☐ b. 19, 38 ☐ c. 8, 50 ☐ d. 14, 25 ☐

B. Click to type the factors of the following numbers. ANS

1. 27 2. 84 3. 30 1. 68

C. Find the prime factors of 75 using the prime factorization method. ANS

D. Find the highest common factor of the following numbers. ANS

1. 48, 18 2. 42, 36 3. 84, 108 4. 36, 90
5. 21, 49 6. 16, 24, 12 7. 15, 25, 30 8. 10, 12, 18

E. Find the lowest common multiple of the following numbers. ANS

1. 45, 35 2. 21, 49 3. 24, 40 4. 36, 72
5. 25, 75 6. 42, 63, 70 7. 21, 25, 35 8. 8, 16, 32

F. Match the following. ANS

1. 3rd and 6th multiple of 3 — a. 10, 20
2. The numbers divisible by 2 and 5 — b. 2, 4
3. Prime factors of 20 — c. 9, 18
4. Common factors of 8 and 28 — d. 2, 2, 5