

CBSE
2026-27
SESSION

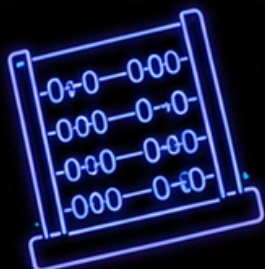
$\sqrt{x}$

CLASS 10

π

COMPLETE
STUDY NOTES

WITH
IMPORTANT
QUESTIONS



$\sqrt{2}$

$$a^2 - b^2 = (a-b)(a+b)$$

MATHEMATICS

NCERT BASED | CBSE SYLLABUS

Chapter 1

REAL NUMBERS



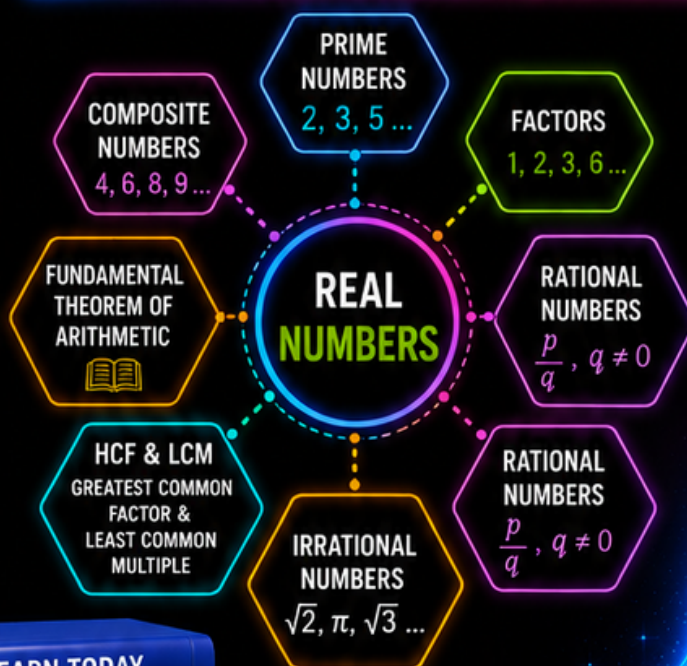
$$\frac{p}{q}, q \neq 0$$

HCF × LCM
= Product of
two numbers

★ INCLUDES ★

- ✓ Detailed Notes
- ✓ Formulas
- ✓ Important Questions
- ✓ Case Based Questions
- ✓ MCQs
- ✓ Previous Year Questions
- ✓ Chapter Summary
- ✓ Exam Tips & Tricks

★ COMPLETE STUDY NOTES ★



In Mathematics,
there is no
shortcut to
success.

Understand,
Practice and
Succeed.



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CLASS 10
MATHEMATICS
CHAPTER 1
REAL NUMBERS

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★ Complete Study Notes | CBSE 2026-27 ★

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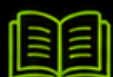
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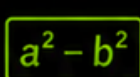
Success in
Mathematics
begins with
strong
concepts
and regular
practice.

*Keep Learning,
Keep Practising,
Keep Growing!*

99



DETAILED
NOTES



FORMULA
SHEET



IMPORTANT
QUESTIONS



CASE STUDY
QUESTIONS



MCQS



PYQS



CHAPTER
SUMMARY



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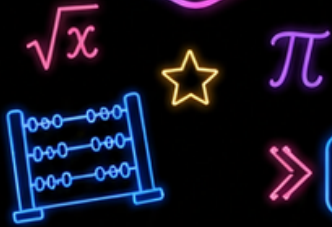


CLASS 10
MATHEMATICS
CHAPTER 1
REAL NUMBERS

★ COMPLETE STUDY NOTES ★



LEARNING OUTCOMES



By the end of this chapter, you will be able to:



01



Understand the concept of **Real Numbers** and their types.



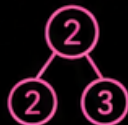
$$a^2 - b^2 = (a-b)(a+b)$$

02



Differentiate between **Rational** and **Irrational Numbers**.

03



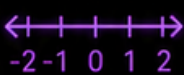
Find **HCF** and **LCM** using Prime Factorisation.

04



Apply the **Fundamental Theorem of Arithmetic** to solve problems.

05



Represent **Real Numbers** on the **Number Line**.

06

$\sqrt{2}, \sqrt{3}$

Prove that $\sqrt{2}$ and $\sqrt{3}$ are **Irrational Numbers** using logical reasoning.

07



Solve Board Exam Questions with confidence using concepts, formulas and shortcuts.



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LEARN



PRACTICE

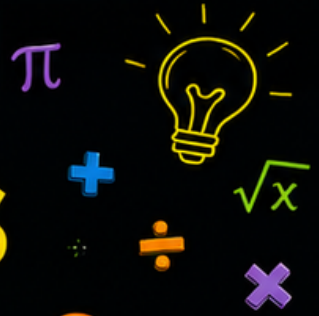


SUCCEED





★ CLASS 10 MATHEMATICS ★ CHAPTER 1 REAL NUMBERS



MIND MAP

REAL NUMBERS

2

RATIONAL NUMBERS

A number that can be written in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

Examples

$$\frac{3}{5}, \frac{-7}{4}, 0, \frac{9}{11}$$

3

IRRATIONAL NUMBERS

A number that cannot be written in the form $\frac{p}{q}$, $q \neq 0$.

Examples

- $\sqrt{2}$
- $\sqrt{3}$
- $\sqrt{5}$
- π (pi)
- and many more...

6

LCM

(LEAST COMMON MULTIPLE)

Product of all prime factors (greatest powers).

Example

$$\begin{aligned} 12 &= 2^2 \times 3 \\ 18 &= 2 \times 3^2 \\ \text{LCM} &= 2^2 \times 3^2 = 36 \end{aligned}$$

9

IMPORTANT PROOFS



- $\sqrt{2}$ is Irrational
 - $\sqrt{3}$ is Irrational
- (Method of Contradiction)

1

REAL NUMBERS

The set of all real numbers includes both rational and irrational numbers.

$$\begin{aligned} \text{Real Numbers} &= \\ &\text{Rational Numbers} \\ &+ \\ &\text{Irrational Numbers} \end{aligned}$$

4

FUNDAMENTAL THEOREM OF ARITHMETIC

Every composite number can be expressed as a product of prime numbers in a unique way, except for the order.

Example

$$60 = 2^2 \times 3 \times 5$$

5

HCF

(HIGHEST COMMON FACTOR)

Product of common prime factors (smallest powers).

Example

$$\begin{aligned} 12 &= 2^2 \times 3 \\ 18 &= 2 \times 3^2 \\ \text{HCF} &= 2 \times 3 = 6 \end{aligned}$$

8

COPRIME NUMBERS

Two numbers are called coprime if their HCF = 1.

Examples

- (8, 15)
- (9, 10)
- (14, 25)



7

RELATION BETWEEN HCF & LCM

$$\text{HCF} \times \text{LCM} = \text{Product of the Two Numbers}$$

or

$$\text{HCF}(a, b) \times \text{LCM}(a, b) = a \times b$$

KEY POINTS TO REMEMBER

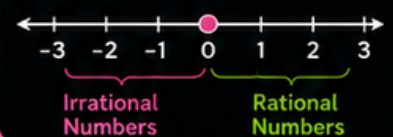
- ★ Learn Prime Factorisation Method.
- ★ $\text{HCF} \times \text{LCM} = \text{Product of Two Numbers}$.
- ★ Rational numbers can be written as $\frac{p}{q}$ ($q \neq 0$).
- ★ Irrational numbers cannot be written as $\frac{p}{q}$.
- ★ Real Numbers = Rational + Irrational.



10

NUMBER LINE

All real numbers can be represented on the number line.



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Real Numbers: Notes with Detailed Explanation and Examples (One Shot Revision)

Topics to be covered:

- **Fundamental theorem of Arithmetic**
- **Revisiting Rational and irrational numbers**

TOPIC 1: Fundamental Theorem of Arithmetic

Prime and Composite Numbers

A number is called a **prime number** if it has no factors other than 1 and the number itself.

E.g. 2, 3, 5, 7, 11, 23, 43, and 71 are prime numbers.

A number is called a **composite number**, if it has at least one factor other than 1 and the number itself.

E.g. 4, 6, 24, 45, and 188 are composite numbers.

Important Points to Remember:

- ❖ 1 is neither prime nor composite.
- ❖ 2 is the smallest prime number. 2 is the only **even prime number**.
- ❖ The smallest composite even number is 4 and the smallest composite odd number is 9.
- ❖ Prime numbers have only two factors, **1 and the number itself**. As 1 is not a prime number, **do not include** it when expressing a number as a product of prime factors.

Factor of a Number:

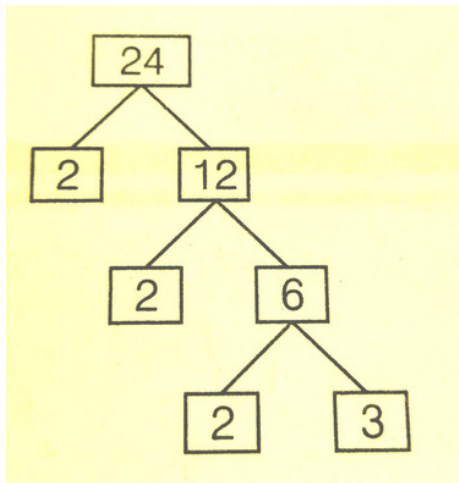
If a number divides another number exactly (without leaving any remainder), then the number which divides, is called a **factor** of the number that has been divided.

e.g. 1, 2, 3, 6, and 12 are the factors of 24.

FactorTree

A chain of factors that is represented in the form of a tree, called a **factor tree**.

E.g. Factors of 24 by factor tree are given as



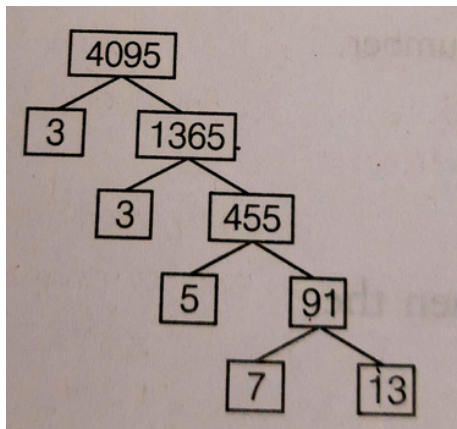
Here, **2 and 3** are prime factors of 6. Number 6 is a factor of 12 and 12 is a factor of 24. This chain of factors is represented in the form of a tree.

Thus, factors of $24 = 2 \times 2 \times 2 \times 3$

$24 = 2^3 \times 3$ as a product of powers of prime.

****In this factor tree method, we take the smallest prime number, which divides the given number exactly, i.e. we try to divide the number by 2 or 3 or 5 or 7 or 11, and so on.**

Example. Factorise the number 4095 through the factor tree.



Hence, $4095 = 3 \times 3 \times 5 \times 7 \times 13$ as a product of primes.

The Fundamental Theorem of Arithmetic

According to the fundamental theorem of arithmetic, every composite number can be written (factorised) as the **product of primes** and this factorisation expressed is **unique**, apart from the order in which the prime factors occur.

Composite number = **Product of prime numbers**

Or

Any integer greater than 1, either be a prime number or can be written as a unique product of prime numbers.

e.g. 15 can be written as 3×5 or 5×3 , where 3 and 5 are prime numbers.

The prime factorisation of a natural number is **unique**, except for the order of its factors.

e.g. 12 is equal to the product of the prime numbers **2, 2, and 3** together.

i.e. $12 = 2 \times 2 \times 3$ which is same as $3 \times 2 \times 2$ or $2 \times 3 \times 2$.

We would probably write it as $12 = 2^2 \times 3$ It is still a **unique combination**(2, 2, and 3).

HCF and LCM By Prime Factorisation Method

The method of finding the **HCF and LCM** of two or more positive numbers by using the **Fundamental theorem of arithmetic** is called the **prime factorisation method**.

In this method, first we express the given two or more numbers as the **product of prime factors**. Then,

(i) **HCF** of two or more numbers = **Product of the smallest power** of each **common prime factor** involved in the numbers.

If there is no common prime factor, then the HCF of the given number is 1.

(ii) **LCM** (Least Common Multiple) of two or more numbers is the smallest number that is divisible by all the given numbers.

LCM of two or more numbers = Product of the **greatest power** of each prime factor involved in the numbers, with the highest power.

Example:

Find the LCM and HCF of 120 and 144 by the fundamental theorem of arithmetic.

Solution:

Prime factorisation of 120 = $2 \times 2 \times 2 \times 3 \times 5 = 2^3 \times 3 \times 5$

and the prime factorisation of 144 = $2 \times 2 \times 2 \times 2 \times 3 \times 3 = 2^4 \times 3^2$

Here, 2^4 , 3^2 and 5^1 are the **greatest exponents** of the prime factors 2, 3 and 5 in two numbers.

Now, $\text{LCM}(120, 144) = 2^4 \times 3^2 \times 5 = 720$

Here, 2^3 and 3^1 are the **smallest exponent** of the common factors of 2 and 3.

$\text{HCF}(120, 144) = 2^3 \times 3 = 24$

Hence, LCM and HCF of 120 and 144 are 720 and 24.

Relation between Numbers and their HCF and LCM:

For any two positive integers a and b, the relation between these numbers and their HCF and LCM is

$$\text{HCF (a,b) x LCM (a,b) = Product of a and b}$$

$$\text{HCF (a,b) x LCM (a,b) = a x b}$$

$$\text{HCF(a, b) = } \frac{(a \times b)}{\text{LCM(a, b)}}$$

OR

$$\text{LCM(a, b) = } \frac{(a \times b)}{\text{HCF(a, b)}}$$

Example 11. If the HCF of two numbers is 12 and their product is 1800, find their LCM.

Solution: Let, the two numbers are a and b.

Given: HCF (a, b) = 12 and product (a x b) = 1800

We know that,

$$\text{HCF (a,b) x LCM (a,b) = Product of a and b}$$

$$12 \times \text{LCM (a, b) = 1800}$$

$$\text{LCM (a, b) = } 1800 \div 12$$

$$\text{LCM (a, b) = 150}$$

Hence, the required LCM is 150.

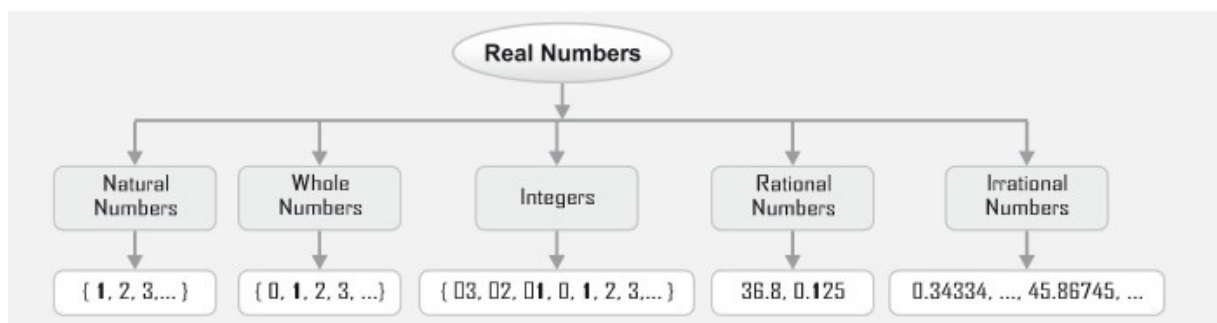
Topic 2:

Revisiting Rational and Irrational Numbers

Real Numbers:

A Number which is either rational or irrational is called a real number.

Flow chart of Real numbers:



Rational Numbers

A number that **can be expressed as p/q** , where p and q are integers and $q \neq 0$, is called a rational number. e.g. $3/7$, $13/5$, $-4/3$

Irrational Numbers

A number that **cannot be expressed in the form p/q** where p , and q are integers and $q \neq 0$, is called an irrational number.

E.g. $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$, $0.2022022202222, \dots$, etc.

Coprime Integers: A pair of integers **having no common factors other than 1** (or -1), are called coprime integers.

e.g. (1, 3), (-2, 5), (6, 35), etc are coprime integers.

Theorem 1: Let p be a prime number and a be a positive integer. If p divides a^2 , then p divides a .

Theorem 2: $\sqrt{2}$ is irrational.

Proof: Let us assume that $\sqrt{2}$ is rational. Then, it will be of the form where a , and b are integers and $b \neq 0$.

Again, let a and b have no common factor other than 1.

$\sqrt{2} = a/b$, where a and b are **coprime integers**.

On squaring both sides, we get

$$2 = a^2/b^2$$

$$\Rightarrow 2b^2 = a^2 \dots\dots(1)$$

$\Rightarrow 2$ divides $a^2 \Rightarrow 2$ divides a **[from Theorem 1]**

Then, a can be written as $2m$, where m is an integer.

On putting $a = 2m$ in Eq. (i), we get

$$2b^2 = (2m)^2$$

$$\Rightarrow 2b^2 = 4m^2$$

$$\Rightarrow b^2 = 2m^2$$

So, 2 divides $b^2 \Rightarrow 2$ divides b **[from Theorem 1]**

Thus, **2 is a common factor of a and b .**

But this **contradicts** the fact that a and b have no common factor other than 1. The **contradiction** arises by assuming that $\sqrt{2}$ is rational.

Hence, $\sqrt{2}$ is irrational.

Hence proved.

Method of Finding Irrationality of Numbers

We know that a number is an irrational number, if it **cannot be written or expressed in the form p/q** , where p , and q are integers and $q \neq 0$. Infact, for any prime number p , $\sqrt{p}$ is an irrational number.

To prove the irrationality of the numbers, we use the method of **contradiction**.

EXAMPLE: Prove that $\sqrt{3}$ is an irrational number.

We can solve this same like Theorem 2



★ CLASS 10 MATHEMATICS ★

CHAPTER 1

REAL NUMBERS



FORMULA SHEET

1 FUNDAMENTAL THEOREM OF ARITHMETIC

Every composite number can be expressed as a product of prime numbers.

EXAMPLE:

$$60 = 2^2 \times 3 \times 5$$



2 HCF (HIGHEST COMMON FACTOR)



HCF = Product of Common Prime Factors (Smallest Powers)

EXAMPLE:

$$12 = 2^2 \times 3$$

$$18 = 2 \times 3^2$$

$$\text{HCF} = 2 \times 3 = 6$$

3 LCM (LEAST COMMON MULTIPLE)

LCM = Product of All Prime Factors (Greatest Powers)

EXAMPLE:

$$12 = 2^2 \times 3$$

$$18 = 2 \times 3^2$$

$$\text{LCM} = 2^2 \times 3^2 = 36$$

4 RELATION BETWEEN HCF & LCM

HCF $\times$ LCM = Product of the Two Numbers

or

$$\text{HCF}(a, b) \times \text{LCM}(a, b) = a \times b$$

5 RATIONAL NUMBERS

A number that can be written as

$$\frac{p}{q}$$

where

- p and q are integers
- $q \neq 0$

EXAMPLES:

$$\frac{3}{5}, -\frac{7}{4}, 0, \frac{9}{11}$$



6 IRRATIONAL NUMBERS

Cannot be written in the form p/q .

EXAMPLES:

- $\sqrt{2}$
- $\sqrt{3}$
- $\sqrt{5}$
- π (pi)



7 REAL NUMBERS

Real Numbers
=
Rational Numbers
+
Irrational Numbers

8 COPRIME NUMBERS

Two numbers are called coprime if their HCF = 1.

EXAMPLES:

$$(8, 15), (9, 10), (14, 25)$$



9 IMPORTANT PROOFS

- ✓ $\sqrt{2}$ is Irrational
- ✓ $\sqrt{3}$ is Irrational
(Method of Contradiction)

BOARD EXAM TIPS

- ✓ Learn Prime Factorisation Method.
- ✓ Remember:
HCF $\times$ LCM = Product of Two Numbers
- ✓ Revise the definitions of Rational & Irrational Numbers.
- ✓ Practice proofs of $\sqrt{2}$ and $\sqrt{3}$.



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NCERT MATHEMATICS

CHAPTER 1 – REAL NUMBERS

Class 10 Maths

CHAPTER 1 - REAL NUMBERS

26 Previous year questions (PYQS)

Q.1 Explain why $(3 \times 5 \times 7) + 7$ is a composite number? **CBSE 2015**

Q.2 Write the HCF of the smallest composite number and the smallest prime number. **CBSE 2008,18**

Answer: 2

Q.3 Find the LCM and HCF of 120 and 144 by fundamental theorem of arithmetic. **CBSE 2011**

Answer: 720 , 24

Q.4 Two positive integers a and b can be written as $a = x^3y^2$ and $b = xy^3$. x, y are the prime numbers. Find the LCM of (a,b). **CBSE 2019**

Answer: x^3y^3

Q.5 The HCF of two numbers a and b is 5 and the LCM is 20. Find the product of ab. **CBSE 2019**

Answer: 1000

Q.6 Check whether 16^n can end with the digit 0 or 5, for any natural number n. **CBSE 2015**

Q.7 If two positive integers p and q can be expressed as $p = ab^2$ and $q = a^3b$; where a,b being prime numbers, find the LCM (p,q). **CBSE 2011**

Answer: a^3b^2

Q.8 If $\text{HCF}(253, 440) = 11$ and $\text{LCM}(253, 440) = 253 \times R$. find the value of R. **CBSE 2011,12**

Answer: 40

Q.9 Prove that $\sqrt{2}$ is irrational. **CBSE 08, 09, 10, 19**

Q.10 Prove that $\sqrt{3}$ is an irrational number . **CBSE 2020 Basic**

Q.11 Prove that $3\sqrt{2}$ is an irrational number. **CBSE 2008**

Q.12 Prove that $(2 + \sqrt{3})/5$ is an irrational number, given that $\sqrt{3}$ is an irrational number. **CBSE 2019**

Q.13 Is the product of a rational number and an irrational number, a rational number? Is the product of two irrational numbers, a rational number or an irrational number? Justify by giving examples. **CBSE 2015**

Answer: No, either rational or irrational

Q.14 Prove that each of the following is an irrational number.

(i) $2\sqrt{3}/5$ **CBSE 11, 12**

(ii) $6 + \sqrt{2}$ **CBSE 10, 11**

(iii) $5 - \sqrt{2}$ **CBSE 15**

Q.15 Prove that $2\sqrt{3} + \sqrt{5}$ is an irrational number. Also, check whether $(2\sqrt{3} + \sqrt{5})(2\sqrt{3} - \sqrt{5})$ is rational or irrational. **CBSE 2012**

Q.16 Find the HCF and LCM of 12, 15 and 21 by applying the prime factorization method. **CBSE 2020 standard**

Answer: 3 and 420

Q.17 Check whether 6^n can end with the digit 0 for any natural number n . **CBSE 2010, 11, 12**

Q.18 Explain why $(7 \times 11 \times 13) + 13$ and $(7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1) + 5$ are composite numbers? **CBSE 2012, 14, 15**

Q.20 Prove that $\sqrt{5}$ is an irrational number . **CBSE 2020 (standard) , 19, 15**

Q.21 Check whether 15^n can end with the digit 0 for any natural number n . **CBSE 2011, 12**

Q.22 Prove that $2 + \sqrt{5}$ is an irrational number . **CBSE 2011, 12**

Q.22 Prove that $(5 + 3\sqrt{2})$ is an irrational number, given that $\sqrt{2}$ is an irrational number. **CBSE 2018**

Q.23 On GT road, three consecutive traffic lights change after 36, 42 and 72 seconds. If the lights are first switched on at 9:00 a.m. then at what time will they change simultaneously? **CBSE 2012**

Answer: 9:08:24 am

Q.24 Find HCF and LCM of 404 and 96 and verify that $\text{HCF} \times \text{LCM} =$ product of the two given. **CBSE 2018**

Answer: HCF: 4 LCM: 9696 product: 38784

Q.25 Manoj and Aarti drive around a circular sports field. Manoj takes 16 minutes to complete one round while Aarti completes the round in 20 minutes. If both start at the same point, at the same time and go in the same direction, then after how much time will they meet at the starting point? **CBSE 2012**

Answer: 80 min

Q.26. Find the least number which when divided by 12, 16 and 24 leaves the remainder 7 in each case. **CBSE 2023**

Real Numbers imp questions MATHS STANDARD CLASS 10

16 December 2022

12:05

CH-1 Real Numbers 15 Important Questions MATHS STANDARD

I. Choose the correct alternative from the given options.

Q. 1. The LCM of two numbers is 2400. Which of the following cannot be their HCF?

(A) 300 (B) 400 (C) 500 (D) 600

Q. 2. The difference of the irrational numbers $(5 + 2\sqrt{3})$ and $(5 - 2\sqrt{3})$ is:

(A) $5\sqrt{3}$ (B) $6 + 2\sqrt{3}$ (C) $5 + 4\sqrt{3}$ (D) 10

Q. 3. The LCM of $2^5 \times 3 \times 5$ and $2^2 \times 7 \times 5$ is:

(A) 140 (B) 3260 (C) 1360 (D) 3360

Q. 4. The quotient of $(5 + 3\sqrt{2})$ and $(5 - 3\sqrt{2})$ is:

**(A) $(43 + 30\sqrt{2})/7$ (B) $(43 - 30\sqrt{2})/7$
(C) $43 + 30\sqrt{2}$ (D) $-(43 + 30\sqrt{2})$**

Q. 5. Given that LCM of two numbers is 1449 and their HCF is 23. If one of the numbers is 207, then other number is:

(A) 261 (B) 161 (C) 361 (D) 167

Q. 6. π is a/an:

(A) rational (B) composite (D) prime (C) irrational

II. Case-Based Question

Q. 7. A sweet seller has 420 Bundi, Laddoo and 130 badam barfis. He wants to stack them in such a way that each stack has the same number, and they take up the least area of the tray.

Read carefully the above paragraph and answer any four questions:

(i) The prime factors of 420 are:

- (A) $2^2 \times 3^2 \times 5 \times 7$ (B) $2 \times 3 \times 5 \times 7$
(C) $2 \times 3 \times 5^2 \times 7$ (D) $2^2 \times 3 \times 5 \times 7$

(ii) Find the HCF of 420 and 130 is:

- (A) 10 (B) 30 (C) 20 (D) 15

(iii) The LCM of 420 and 130 is:

- (A) 4560 (B) 5460 (C) 6540 (D) 5640

(iv) The sum of exponents of prime factors in the prime factorization of 420 is:

- (A) 2 (B) 3 (C) 5 (D) 4

(v) The sum of exponents of prime factors in the prime factorization of 130 is:

- (A) 1 (B) 3 (C) 2 (D) 4

III. Very Short Answer Type Questions

Q. 8. a and b are two positive integers such that the least prime factor of a is 3 and the least prime factor of b is 5. Then calculate the least prime factor of (a + b).

Q. 9. If HCF of two numbers is 18 and their product is 12960, then find the LCM.

Q. 10. If p is a prime number, then find LCM of p , p^2 and p^3 .

IV. Short Answer Type Questions-I

Q. 11. Write whether $(2\sqrt{125} + \sqrt{25})/3\sqrt{5}$ on simplification gives an irrational or a rational number.

Q. 12. On a morning walk three persons steps off together and their steps measure 40 cm, 42 cm and 45 cm respectively. What is the minimum distance each should walk so that each can cover the same distance in complete steps?

Q. 13. Prove that $\sqrt{2}$ is an irrational number.

V. Short Answer Type Questions-II

Q. 14. If p is a prime number, then prove that $\sqrt{p}$ is an irrational.

Q. 15. Three bells toll at intervals of 9, 12, 15 minutes respectively. If they start tolling together, after what time will they next toll together?

VI. Long Answer Type Questions

Q. 16. Prove that $6 + \sqrt{2}$ is an irrational number.

CLASS 10 MATHEMATICS

CHAPTER 1

REAL NUMBERS

SUMMARY

1 PRIME NUMBERS

- Have exactly 2 factors.
- Examples: 2, 3, 5, 7, 11

2

2 COMPOSITE NUMBERS

- Have more than 2 factors.
- Examples: 4, 6, 8, 9, 12

6

3 FUNDAMENTAL THEOREM OF ARITHMETIC

Every composite number can be expressed as a unique product of prime numbers (except for the order of factors).

Example:

$$60 = 2^2 \times 3 \times 5$$



5 RATIONAL NUMBERS

- Can be written in the form $\frac{p}{q}$ where $q \neq 0$
- Examples: $\frac{3}{5}$, $-\frac{7}{4}$, 0



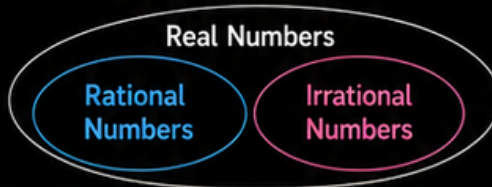
6 IRRATIONAL NUMBERS

- Cannot be written in the form $\frac{p}{q}$
- Examples: $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$, π



7 REAL NUMBERS

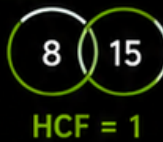
Real Numbers
= Rational Numbers
+ Irrational Numbers



8 COPRIME NUMBERS

Two numbers are coprime if their HCF = 1

Examples:
(8, 15), (9, 10)



9 IMPORTANT PROOFS

- $\sqrt{2}$ is Irrational
 - $\sqrt{3}$ is Irrational
- (Method of Contradiction)



★ BOARD EXAM TIPS



Learn Prime Factorisation.



Remember:
 $HCF \times LCM =$
Product of
Two Numbers



Revise Rational & Irrational Numbers.



Practice proofs
of $\sqrt{2}$ and $\sqrt{3}$.

10 FINAL REVISION

- ✓ Prime & Composite Numbers
- ✓ Prime Factorisation
- ✓ Fundamental Theorem of Arithmetic
- ✓ HCF & LCM
- ✓ Relation between HCF & LCM
- ✓ Rational Numbers
- ✓ Irrational Numbers
- ✓ Real Numbers
- ✓ Coprime Numbers
- ✓ Proof of $\sqrt{2}$
- ✓ Proof of $\sqrt{3}$



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CLASS 10
MATHEMATICS
CHAPTER 1
REAL NUMBERS

♥ You've Completed ♥

★ COMPLETE STUDY NOTES ★



**THANK
YOU!**

FOR CHOOSING OUR NOTES



Dear Learner,

I am so happy to be a part of your learning journey.
I hope these notes help you **understand** the concepts
clearly, build **confidence** and **achieve** excellent results.

Keep **Learning**, Keep **Practicing** and
Keep Growing!



WHAT YOU GOT IN THIS NOTES



DETAILED
NOTES



FORMULAS



IMPORTANT
QUESTIONS



CASE BASED
QUESTIONS



MULTIPLE
CHOICE
QUESTIONS



PREVIOUS
YEAR
QUESTIONS



CHAPTER
SUMMARY

YOUR SUPPORT MEANS A LOT! ♥



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*Best Wishes,
Nikita Singh 😊*



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