## Class 6

## Important Formulas

## Chapter 2 - Whole Numbers

1. A factor of a number is that number which divides the number exactly.
2. A multiple of a number is exactly divisible by the number.
3. Every number is a factor as well as a multiple of itself.
4. 1 is a factor of every number and is the only number, which has exactly one factor.
5. Every number other than 1 has at least two factors, namely 1 and the number itself.
6. A number having no factor other than 1 and the number itself is called a prime number. In other words, a prime number has exactly two distinct factors, 1 and the number itself.
7. A number having factors other than 1 and the number itself is called a composite number.
8. The number 1 is neither a prime nor a composite number, because it has a single factor.
9. Numbers divisible by 2 are called even numbers.
10. Numbers not divisible by 2 are called odd numbers.
11. 2 is the only even prime number.
12. Every prime number other than 2 is odd, but every odd number is not necessarily a prime number.
13. Every even number greater than 4 can be expressed as the sum of two odd prime numbers.
14. Primes occurring in pairs with a difference of two are called twin primes.
15. Every number other than 1 can be uniquely expressed as the product of prime numbers except for the order of prime numbers.
16. A number is divisible by -
(i) 2 , if the unit's digit of the number is $0,2,4,6$ or 8 .
(ii) 3 , if the sum of the digits is divisible by 3 .
(iii) 4 , if the number formed by its digits in ten's and unit's places is divisible by 4.
(iv) 5 , if unit's digit is 0 or 5 .
(v) 6 , if it is divisible by both 2 and 3 .
(vi) 8 , if the number formed by its digits in hundred's, ten's and unit's places is divisible by 8 .
(vii) 9 , if the sum of the digits is divisible by 9 .
(viii) 10 , if the unit's digit is 0 .
(ix) 11, if the difference of the sum of its digits in odd places and the sum of its digits in even places (starting from unit's place) is either 0 or divisible by 11.
17. The H.C.F. of two or more numbers is the largest number that divides all the given numbers.
18. The L.C.M. of two or more numbers is the smallest number which is divisible by all the given numbers.
19. The product of H.C.F. and L.C.M. of two numbers equals their product. This result may not be true for more than two numbers.
20. The H.C.F. of any two prime or co-prime numbers equals 1.
21. The L.C.M. of any two prime or co-prime numbers equals their product.
22. The H.C.F. of two or more numbers is never greater than any of the numbers.
23. The L.C.M. of two or more numbers is never less than any of the numbers.
24. The H.C.F. of two or more numbers is a factor of their L. C.M.
25. If $x$ is a factor of $y$, then the H.C.F. of $x$ and $y$ is $x$ and L.C.M, of $x$ and $y$ is $y$.

## NCERT Solutions for Class 6 Maths Chapter 1

- Knowing our Numbers Class 6 Ex 1.1
- Knowing our Numbers Class 6 Ex 1.2
- Knowing our Numbers Class 6 Exercise 1.3


## NCERT Solutions for Class 6 Maths Chapter 2

- Whole Numbers Class 6 Ex 2.1


## NCERT Solutions for Class 6 Maths Chapter 3

- Playing with Numbers Class 6 Ex 3.1
- Playing with Numbers Class 6 Ex 3.2
- Playing with Numbers Class 6 Ex 3.3
- Playing with Numbers Class 6 Ex 3.4
- Playing with Numbers Class 6 Exercise 3.5
- Playing with Numbers Class 6 Exercise 3.6
- Playing with Numbers Class 6 Exercise 3.7


## NCERT Solutions for Class 6 Maths Chapter 4

- Basic Geometrical Ideas Class 6 Ex 4.1
- Basic Geometrical Ideas Class 6 Ex 4.2
- Basic Geometrical Ideas Class 6 Ex 4.3
- Basic Geometrical Ideas Class 6 Exercise 4.4
- Basic Geometrical Ideas Class 6 Exercise 4.5
- Basic Geometrical Ideas Class 6 Exercise 4.6


## NCERT Solutions for Class 6 Maths Chapter 5

- Understanding Elementary Shapes Class 6 Ex 5.1
- Understanding Elementary Shapes Class 6 Ex 5.2
- Understanding Elementary Shapes Class 6 Ex 5.3
- Understanding Elementary Shapes Class 6 Ex 5.4
- Understanding Elementary Shapes Class 6 Ex 5.5
- Understanding Elementary Shapes Class 6 Exercise 5.6
- Understanding Elementary Shapes Class 6 Exercise 5.7
- Understanding Elementary Shapes Class 6 Exercise 5.8
- Understanding Elementary Shapes Class 6 Exercise 5.9


## Class 6 Maths NCERT Solutions Chapter 6

- Integers Class 6 Ex 6.1
- Integers Class 6 Ex 6.2
- Integers Class 6 Exercise 6.3


## Class 6 Maths NCERT Solutions Chapter 7

- Fractions Class 6 Ex 7.1
- Fractions Class 6 Ex 7.2
- Fractions Class 6 Ex 7.3
- Fractions Class 6 Exercise 7.4
- Fractions Class 6 Exercise 7.5
- Fractions Class 6 Exercise 7.6


## Class 6 Maths NCERT Solutions Chapter 8

- Decimals Class 6 Ex 8.1
- Decimals Class 6 Ex 8.2
- Decimals Class 6 Ex 8.3
- Decimals Class 6 Exercise 8.4
- Decimals Class 6 Exercise 8.5
- Decimals Class 6 Exercise 8.6


## Class 6 Maths NCERT Solutions Chapter 9

- Data Handling Class 6 Ex 9.1
- Data Handling Class 6 Ex 9.2
- Data Handling Class 6 Exercise 9.3
- Data Handling Class 6 Exercise 9.4


## Class 6 Maths NCERT Solutions Chapter 10

- Mensuration Class 6 Ex 10.1
- Mensuration Class 6 Ex 10.2
- Mensuration Class 6 Exercise 10.3


## Class 6 Maths NCERT Solutions Chapter 11

- Algebra Class 6 Ex 11.1
- Algebra Class 6 Ex 11.2
- Algebra Class 6 Exercise 11.3
- Algebra Class 6 Exercise 11.4
- Algebra Class 6 Exercise 11.5


## Class 6 Maths NCERT Solutions Chapter 12

- Ratio and Proportion Class 6 Ex 12.1
- Ratio and Proportion Class 6 Ex 12.2
- Ratio and Proportion Class 6 Exercise 12.3


## Class 6 Maths NCERT Solutions Chapter 13

- Symmetry Class 6 Ex 13.1
- Symmetry Class 6 Exercise 13.2
- Symmetry Class 6 Exercise 13.3


## Class 6 Maths NCERT Solutions Chapter 14

- Practical Geometry Class 6 Ex 14.1
- Practical Geometry Class 6 Ex 14.2
- Practical Geometry Class 6 Ex 14.3
- Practical Geometry Class 6 Exercise 14.4
- Practical Geometry Class 6 Exercise 14.5
- Practical Geometry Class 6 Exercise 14.6


## Chapter 1 Knowing Our Numbers

- Introduction
- Comparing Numbers Worksheet
- Large Numbers In Practice
- Using Brackets
- Roman Numerals Chart


## Chapter 2 Whole Numbers

- Introduction
- Whole Numbers
- The Number Line
- Properties of Whole Numbers
- Patterns In Whole Numbers


## Chapter 3 Playing With Numbers

- Introduction
- Factors And Multiples Worksheet
- Prime And Composite Numbers Chart and Worksheets
- Divisibility Rules 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3,2
- Common Factors And Common Multiples
- Some More Divisibility Rules
- Prime Factorisation Worksheets
- Highest Common Factor Worksheets
- Lowest Common Multiple Worksheet
- Hcf And Lcm Formulas, Problems with Solutions


## Chapter 4 Basic Geometrical Ideas

- Introduction
- Points, A Line Segment, Ray, and A Line
- Intersecting Lines and Parallel Lines
- Curves
- Types of Polygons
- What is Angle in Geometry
- Median, altitude of Triangle
- What is a Quadrilateral
- Parts of the Circle

Chapter 5 Understanding Elementary Shapes

- Introduction
- Comparison of Line Segments
- Different Types of Angles
- Measure an Angle with a Protractor
- Classification of Triangles
- Different Types of Quadrilaterals
- Different types of Three Dimensional Shapes


## Chapter 6 Integers

- Introduction
- Integers Examples
- Operations with Integers Worksheet


## Chapter 7 Fractions

- Introduction
- Types of fraction
- Fraction on The Number Line
- Proper Fractions
- Improper And Mixed Fractions
- Equivalent Fractions Chart
- Simplest Form Of A Fraction
- Like Fractions
- Comparing Fractions Worksheets
- Addition And Subtraction Of Fractions


## Chapter 8 Decimals

- Introduction
- Tenths and Hundreths
- Convert Unlike Decimals to like decimals
- Using Decimals
- Addition Of Numbers With Decimals
- Subtraction Of Decimals


## Chapter 9 Data Handling

- Introduction
- Recording Data
- Collection and Organisation of Data
- Pictograph Examples and Worksheets
- Interpretation of A Pictograph
- Drawing A Pictograph
- A Bar Graph


## Chapter 10 Mensuration

- Introduction
- Perimeter of Closed Shapes
- Find Area of Plane Figures


## Chapter 11 Algebra

- Introduction
- Matchstick Patterns
- The Idea Of A Variable
- More Matchstick Patterns
- More Examples Of Variables
- Use Of Variables In Common Rules
- Expressions With Variables
- Using Expressions Practically
- What Is An Equation?
- Solution Of An Equation

Chapter 12 Ratio and Proportion

- Introduction
- What is Ratio and Proportion
- Unitary Method

Chapter 13 Ratio and Proportion

- Introduction
- Making Symmetric Figures: Ink-blot Devils
- Figures with Two Lines of Symmetry
- Figures with Multiple (more than two) Lines of Symmetry
- Reflection and Symmetry

Chapter 14 Practical Geometry
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- Introduction
- Construction of a Circle
- Construction of a Line Segment
- Construction of a Perpendicular Bisector
- Construction of Angles using compass ruler

