Class 6

Important Formulas

Chapter 1 – Knowing Our Numbers

1) Counting numbers 1, 2, 3, 4, 5, 6, ... etc. are known as natural numbers.

2) 1 is the smallest natural number.

3) 0. 1. 2, 3, 4, 5, 6, 7, 8 and 9 are called digits and a group of digits denoting a number is called a numeral or a number.

4) The method of representing a number in digits or figures is called notation and the method of expressing a number in words is called numeration. There are two methods of numeration:
(i) Indian system of numeration (ii) International system of numeration.

5) Place value of a digit in a number = Its face value × Position value

6) 1 million = 10 lakhs
10 million = 1 crore
100 million = 10 crores
1 billion = 100 crores or 1 Arab.

7) 1 km = 1000 meter (m)
1 meter = 100 centimetre (cm)
1 cm = 10 millimetre (mm)
1 kilogram (kg) = 100 grams (gm)
1 litre = 1000 millilitres (m1)

8) In order to estimate or round off a number to the nearest —
(a) tens:
(i) replace the ones digit by 0 and keep other digits as they are, if the digit at ones place is less than 5.
(ii) increase tens digit by 1 and replace the ones digit by 0, if the digit at ones place is greater than or equal to 5.
(b) hundreds:
(i) replace each one of the digits at tens and ones place by 0 and keep all other digits as they are, if the digit at tens place is less than 5.
(ii) increase the digit at hundreds place by 1 and replace each one of the digits at tens and ones place by 0, if the digit at tens place is greater than or equal to 5.
(c) thousands:

(i) replace each one of the digits at hundreds, tens and ones place by 0 and keep all other digits as they are, if the digit at hundreds place is less than 5.
(ii) increase the digit at thousands place by 1 and replace each one of the digits at hundreds, tens and ones place by 0, if the digit at hundreds place is greater than or equal to 5.

9) The roman numerals with the corresponding Hindu – Arabic numerals are:

I	*V*	*X*	*L*	*C*	*D*	*K*
1	5	10	50	100	500	1000

10) To get the values of given roman numerals, we use the following rules:

(a) If a symbol is repeated, its value is added as many times as it occurs.
(b) If a symbol of smaller value is written to the right of a symbol of greater value, we add its value to the value of greater symbol.
(c) If a symbol of smaller value is written to the left of a symbol of greater value, its value is subtracted from the value of the greater symbol.
(d) The symbols V, L and D are never written to the left of a symbol of greater value.
(e) If a smaller numeral is placed between two larger numerals, it is always subtracted from the larger numeral immediately following it.
(f) If a bar is placed over a numeral, it is multiplied by 1000.

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