
Numbers

1 *Arithmetical operations.*

- 1.1 Add, subtract, multiply and divide whole numbers.
- 1.2 Solve operations involving combined addition, subtraction, multiplication and division of whole numbers.
- 1.3 Solve word problems involving addition, subtraction, multiplication and division of whole numbers.

2 *Divisibility, prime factorization, L.C.M. and H.C.F.*

- 2.1 Use the divisibility rules of 2, 3, 4, 5, 6, 9 and 10.
- 2.2 Find the prime factorization of whole numbers.
- 2.3 Find the lowest common multiples of two to three 1-2 digit numbers.
- 2.4 Find the highest common factors of two to three 1-2 digit numbers.

Decimals

1 *Comprehension of decimal numbers.*

- 1.1 Read and interpret decimal numbers.
- 1.2 Compare decimal numbers using $>$ or $<$.
- 1.3 Round off whole numbers to the nearest tens, hundreds, thousands etc.
- 1.4 Round off decimals to the nearest whole number and to the specified number of decimal places.
- 1.5 Convert fractions to decimals and vice-versa.

2 *Operation of decimal numbers.*

- 2.1 Addition of decimal numbers.
- 2.2 Subtraction of decimal numbers.
- 2.3 Solve operations involving addition and subtraction of decimal numbers.
- 2.4 Multiplication of decimal number by a decimal number.
- 2.5 Multiplication and division of decimals by 10, 100, 1000 etc.
- 2.6 Division of decimal numbers by a decimal number.

3 *Application of decimal numbers.*

- 3.1 Solve word problems involving decimal numbers.

Algebra and Equations

1 *Comprehension of algebra.*

- 1.1 Use letters to represent unknowns and write simple algebraic expressions.
- 1.2 Add and subtract algebraic terms.
- 1.3 Multiply algebraic terms.
- 1.4 Divide algebraic terms.
- 1.5 Evaluate algebraic expressions by substitution.
- 1.6 Simplify expressions with parenthesis.
- 1.7 Factorize algebraic expressions (exclude group factorization).

2 *Comprehension of equations.*

- 2.1 Solve linear equations (include cases involving fractional coefficients, exclude: $\frac{x-3}{2} + \frac{2x-1}{5} = 1$).

Ratio and Proportion

1 *Comprehension of rate.*

- 1.1 Use common measures of rate.
- 1.2 Solve problems involving rate.

2 *Comprehension of ratio.*

- 2.1 Find the ratio of two or more quantities.
- 2.2 Simplify ratios with whole numbers.
- 2.3 Simplify ratios with units. (e.g. 7 : 28, 20 hr : 1 day)
- 2.4 Simplify fractional ratios.

3 *Comprehension of proportion.*

- 3.1 Solve word problems involving direct proportions.
- 3.2 Solve word problems involving proportional parts (sharing).
- 3.3 Solve word problems involving alms (*zakaaiy*).

Perimeter

1 *Comprehension of perimeter.*

- 1.1 Find the perimeter of different shapes when the sides are given.
- 1.2 Find the circumference of circles, where the radius or diameter is given.
- 1.3 Find the perimeter of semi circles and quarter circles.
- 1.4 Find the perimeter of compound figures.
- 1.5 Find the dimension of rectangles, squares and circles given its perimeter and other dimensions.

2 *Application of perimeter.*

- 2.1 Solve word problems involving perimeter.

Area

1 *Comprehension of area.*

- 1.1 Use formula to calculate the area of rectangles, squares, triangles, parallelograms, trapeziums and circles.
- 1.2 Find the area of semi circles and quarter circles.
- 1.3 Find the dimension of rectangles, parallelograms, triangles and trapezium given its area and other dimensions.
- 1.4 Find the area of compound figures.
- 1.5 Find the area of shaded regions.

2 *Application of area.*

- 2.2 Solve word problems involving area.

Straight line graph

1 *Comprehension of straight line graphs.*

1.1 Use Cartesian coordinates in two dimensions.

1.2 Draw straight line graphs for the equations in the form $y = mx + c$.