



BLOOM PUBLIC SCHOOL
C-8 Vasant Kunj, New Delhi
Syllabus for the Session 2026-27

Class: X

Subject: MATHEMATICS

SYLLABUS SESSION 2026-27			
MONTH	CHAPTER (NCERT Text Book)	CONTENT	ACTIVITIES/PRACTICALS
April	Ch 1: Real Numbers	Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples, Proofs of irrationality of $\sqrt{2}$, $\sqrt{3}$ and $\sqrt{5}$.	Activity 1: (Activity File) To draw the graph of a quadratic polynomial and observe: (i) The shape of the curve when the coefficient of x^2 is positive. (ii) The shape of the curve when the coefficient of x^2 is negative. (iii) Its number of zeroes.
	Ch 2: Polynomials	Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials	Activity 2: (Activity File) To obtain the solution of a quadratic equation ($x^2 + 4x = 60$) by completing the square geometrically.
	Ch 3: Pair of Linear Equations with Two Variables	Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency.	Activity 3: (Activity File) To verify the conditions of consistency/ inconsistency for a pair of linear equations.
	Ch 4: Quadratic Equations	Standard form of a quadratic equation $ax^2 + bx + c = 0$, ($a \neq 0$). Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots. Situational problems based on quadratic equations related to day-to-day activities to be incorporated	Activity 4: (Activity File) To sketch the graphs of and, $a > 0$, $a \neq 1$ and to examine that they are mirror images of each other.
	Ch 5: Arithmetic Progression	Motivation for studying Arithmetic Progression Derivation of the nth term and sum of the first n terms of A.P. and their application in solving daily life problems	Activity 5: (Activity File) To identify Arithmetic Progressions in some given lists of numbers (patterns). Activity 6: (Activity File) To find the sum of first n natural numbers.

<p style="text-align: center;">May</p>	<p>Ch 6: Triangles</p>	<p>Definitions, examples, counter examples of similar triangles. 1. (Prove) If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio. 2. (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side. 3. (Motivate) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar. 4. (Motivate) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar. 5. (Motivate) If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.</p>	<p>Activity 7: (Activity File) To verify Basic Proportionality Theorem (Thale's theorem).</p>
<p style="text-align: center;">July</p>	<p>Ch 7: Coordinate Geometry</p>	<p>Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division).</p>	
	<p>Ch 8: Introduction to Trigonometry</p>	<p>Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined); motivate the ratios whichever are defined at 0° and 90°. Values of the trigonometric ratios of 30°, 45° and 60°. Relationships between the ratios. Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given.</p>	<p>Activity: Creatively representing the trigonometric ratios.</p>
	<p>Ch 9: Some Applications of Trigonometry</p>	<p>Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30°, 45°, and 60°.</p>	<p>Activity: (Field Activity) To find the height of a building using a clinometer.</p>
<p style="text-align: center;">August</p>		<p>Tangent to a circle at, point of contact 1. (Prove) The tangent at any point of a circle is</p>	<p>Activity 8: (Activity File) To find the number of tangents from a point to a circle.</p>

	Ch 10: Circles	perpendicular to the radius through the point of contact. 2. (Prove) The lengths of tangents drawn from an external point to a circle is equal. 3. (Motivate) Alternative Segment theorem: If a chord is drawn through the point of contact of a tangent to a circle, then the angles made by the chord with the tangent is respectively equal to the angles subtended by the chord in the alternate segments.	Activity 9: (Activity File) To verify that the lengths of tangents to a circle from some external points are equal.
September	Ch 11: Areas related to Circles	Motivate the area of a circle; area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60° , 90° and 120° only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)	
October	Ch 12: Surface Area and Volume	Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones.	
	Ch 13: Statistics	Mean, median and mode of grouped data (bimodal situation to be avoided).	
November	Ch 14: Probability	Classical definition of probability. Simple problems on finding the probability of an event.	Activity 10: (Activity File) To determine experimental probability of a head (or a tail) by tossing a coin 1000 times and compare it with its theoretical probability.
December	Revision for Preboard Exam.	Chapter wise revision Sample papers & Previous	

		years Board Exam papers	
January	Revision Pre-Board Exam Board Practical Exams.	Remedial classes	
February	Revision for Board Exams.	Remedial classes	
March	Revision for Board Exams.	Remedial classes	
ASSESSMENT SYLLABUS			
PERIODIC ASSESSMENT -1	Ch 1: Real Numbers Ch 2: Polynomials Ch 4: Quadratic equations		
PERIODIC ASSESSMENT -2	Ch 3: Pair of Linear Equations in Two Variables Ch 5: Arithmetic Progression Ch 7: Coordinate Geometry		
MID TERM EXAM	Ch 1: Real Numbers Ch 2: Polynomials Ch 3: Pair of Linear Equations in Two Variables Ch 4: Quadratic Equations Ch 5: Arithmetic Progression Ch 6: Triangles Ch 7: Coordinate Geometry Ch 8: Introduction to Trigonometry		
ANNUAL EXAM	Ch 1: Real Numbers Ch 2: Polynomials Ch 3: Pair of Linear Equations in Two Variables Ch 4: Quadratic Equations Ch 5: Arithmetic Progression Ch 6: Triangles Ch 7: Coordinate Geometry Ch 8: Introduction to Trigonometry Ch 9: Some Applications of Trigonometry Ch 10: Circles Ch 11: Areas related to Circles Ch 12: Surface Area and Volume Ch 13: Statistics Ch 14: Probability		

