

Punjab Education, Curriculum, Training & Assessment Authority

SMART/REDUCED SYLLABUS OF GRADE-9 MATHEMATICS - 2026

To facilitate students, the content of *Mathematics–9* has been **rationalized and reduced** from the compulsory textbook. This rationalization aims to help students focus on the **key Student Learning Outcomes (SLOs)** that are essential for conceptual understanding and examination preparation, rather than covering the entire textbook. The **unit-wise Smart / Reduced Syllabus** is provided below. It clearly specifies the **exercises, examples, and questions excluded** from the *Mathematics Grade 9* syllabus for the annual examination. **Teachers and students are advised to follow this Smart / Reduced Syllabus** for effective teaching, learning, and exam preparation.

Name of the Unit	Skipped / Excluded Content of Mathematics-9
1-Real Numbers	• 1.1 Introduction to Real Numbers; Page # 1 to 3. • 1.3 Application of Real Numbers in Daily Life; Page # 14 to 15. • 1.3.1 Temperature Conversion, Example # 10; Page # 15 to 16. • 1.3.2 Profit and Loss, Examples # 11 to 14; Page # 16 to 18. • Exercise # 1.3 (Complete); Page # 18 to 19. • Review Exercise 1: Q # 3,5, 8 to 10; Page # 19 to 20.
2-Logarithms	• 2.4 Laws of Logarithm, Example # 12 - 15; Page # 30 to 34. • Exercise # 2.4 (Complete); Page # 34 to 35. • Review Exercise 2: Q # 1 (ix & x), Q # 7 to 10; Page # 35 to 36.
3-Sets and Functions	• Introduction; Page # 37. • 3.1 Mathematics as the Study of Patterns, Structures and Relationships; Page # 37-39 (before the basic definition of Set). • Example # 5; Page # 51. • Exercise # 3.2, Q # 9, 11 to 13; Page # 54 to 55. • 3.3 Binary Relations, Example # 7,8; Page # 55-56. • 3.3.1 Relation as Table, Ordered Pair and Graphs; Page # 56-57. • 3.3.2 Functions and its Domain and Range, Example # 9; Page # 57-59. • 3.3.3 Notation of Function; Page # 59. • 3.3.4 Linear and Quadratic Functions, Example # 10,11; Page # 59-60. • Exercise # 3.3, (Complete); Page # 61. • Review Exercise 3: Q # 1 (vii to x), Q # 10 to 16; Page # 62 to 64.

Name of the Unit	Skipped / Excluded Content of Mathematics-9
4-Factorization and Algebraic Manipulation	• 4.4 Square Root of an Algebraic Expression Example # 26,27; Page # 77 to 78. • 4.4.1 Real World Problems of Factorization, Example # 28, 29, 30; Page # 78 to 79. • Exercise # 4.4 (Complete); Page # 79 to 80. • Review Exercise 4: Q # 1 (vi), Q # 4 & 5; Page # 81.
5-Linear equations and Inequalities	• 5.3 Feasible Solution, Example # 6; Page # 91-92. • 5.3.2 Maximum and Minimum Values of a Function in the Feasible Solution, Example # 7; Page # 93-94. • Exercise # 5.2 (Complete); Page # 94 to 95. • Review Exercise 5: Q # 1 (ix to x), Q # 3 to 5; Page # 95 to 96.
6-Trigonometry	• Example 12; Page # 109. • Exercise # 6.3, Q # 10 to 12; Page # 111. • Exercise # 6.4, Q # 2 (vii & viii), Q # 3 (iii); Page # 113. • Exercise # 6.5, Q # 5,6 & 9; Page # 117 to 118. • 6.6 The angle of Elevation and the angle of depression, Example # 19 & 20; Page # 118 to 119. • Exercise # 6.6 (Complete); Page # 120. • Review Exercise 6: Q # 3 (iii, iv, v, vi), 5,6; Page # 122.
7-Coordinate Geometry	• Exercise # 7.1, Q # 6,9 & 10; Page # 128. • Exercise # 7.2, Q # 2 (iii, iv), 12 & 13; Page # 140 to 141. • 7.3 Applications of Coordinate Geometry in Real Life Situations, Example # 14, 15, 16, 17, 18, 19, 20; Page # 141 to 144. • Exercise # 7.3 (Complete); Page # 144 to 145. • Review Exercise 7: Q # 4 to 10; Page # 146.
8-Logic	Complete chapter is excluded.

Name of the Unit	Skipped / Excluded Content of Mathematics-9
9-Similar Figures	- Exercise # 9.1, Q # 8 & 9; Page # 166. - Exercise # 9.2, Q # 5 & 8; Page # 172. 9.4 Geometrical properties of polygon and their applications; Page # 177. 9.4.1 Geometrical properties of Regular polygon; Page # 177-178. 9.4.2 Geometrical properties of Triangle; Page # 178. 9.4.3 Geometrical properties of Parallelogram, Example # 13; Page # 178. 9.4.4 Applications of polygon, Examples # 14,15,16,17,18; Page # 179 to 181. - Exercise # 9.4 (Complete); Page # 182. - Review Exercise 9: Q # 1 (vii to x), Q # 4,7,8 & 9; Page # 183 to 184.
10-Graphs of Functions	10.2 Exponential Growth/ Decay of a Practical Phenomenon through its Graph, Example # 12; Page # 193-194. 10.2.1 Gradients of Curves by Drawing Tangents, Example # 13; Page # 194. 10.2.2 Application of Graph in Real Life, Example # 14, 15; Page # 195 to 196. - Exercise # 10.2 (Complete); Page # 197. - Review Exercise 10: Q # 3, 5 to 7; Page # 199.
11-Loci and Construction	11.5.2 Intersection of Loci, Example # 10, 11,12; Page # 209 to 211. 11.6 Real Life Application of Loci; Page # 211. - Exercise # 11.2 (Complete); Page # 212 to 213. - Review Exercise 11: Q # 1 (v to x), Q # 2 to 8; Page # 213 to 214.
12-Information Handling	- Exercise # 12.1: Q # 8; Page # 224. 12.2.4 Weighted Mean, Example # 19, 20; Page # 234 to 235. - Exercise # 12.2: Q # 13 to 20; Page # 238 to 239. - Review Exercise 12: Q # 7 & 12; Page # 241 to 242.
13-Probability	13.6 Expected Frequency, Example # 11; Page # 255. 13.7 Real Life Application on Expected Frequency, Example # 12, 13; Page # 255 to 256. - Exercise # 13.2, Q # 5 to 8; Page # 257. - Review Exercise 13: Q # 1 (v), 2 to 7; Page # 258 to 259.