Grade 9 - Second Unit Test

Answer Keys

Practice Papers 1 & 2

Mathematics

Based on Maharashtra Board Syllabus (NEP 2025-26) - 2nd Quarter

Note:

This document contains the answer keys for Second Unit Test Practice Paper 1 and Practice Paper 2.

Practice Paper 1 - Answer Key

Section A: Polynomials

1. a) 4

1. b) Yes

1. c) -5n

1. d) $6a^2 - 2a$

2. a) 5x - 9 ((10x - 2) - (5x + 7) = 10x - 2 - 5x - 7)

2. b) $2y^2 + 6y - 4$ ($(5y^2 + 4y - 3) - (3y^2 - 2y + 1) = 5y^2 + 4y - 3 - 3y^2 + 2y - 1$)

2. c) $2x^3 - 6x^2 + 10x$

2. d) $a^2 - a - 20$

Section B: Congruence of Triangles

3. a) If three sides of one triangle are equal to the corresponding three sides of another triangle, then the two triangles are congruent.

3. b) SSS

3. c) SAS

4. a) ∠P

4. b) AAS (or ASA, if the third angle is found first)

4. c) [Drawing of two triangles with corresponding sides and angles marked as equal]

Section C: Construction of Triangles

5. a) [Rough sketch of a triangle with sides 5, 6, 7 cm]

5. b) [Rough sketch of a triangle with sides 4 cm and 5 cm, and the included angle 60°]

5. c) [Rough sketch of a triangle with base 6 cm and adjacent angles 70° and 50°]

Practice Paper 2 - Answer Key

Section A: Polynomials

1. a) 6

1. b) No

1. c) 8c

1. d) $4p^2 - 3p + 3$

2. a) $4a + 8$ $((8a + 5) - (4a - 3) = 8a + 5 - 4a + 3)$

2. b) $4x^2 - 6x + 9$ $((6x^2 - x + 2) - (2x^2 + 5x - 7) = 6x^2 - x + 2 - 2x^2 - 5x + 7)$

2. c) $3a^3 + 6a^2 - 12a$

2. d) $b^2 - 3b - 18$

Section B: Congruence of Triangles

3. a) If two angles and the included side of one triangle are equal to the corresponding two angles and the included side of another triangle, then the two triangles are congruent.

3. b) SAS

3. c) ASA

4. a) side QR

4. b) If in two right-angled triangles, the hypotenuse and one side of one triangle are equal to the hypotenuse and the corresponding side of the other triangle, then the two triangles are congruent.

4. c) [Drawing of two triangles with two corresponding sides and the included angle marked as equal]

Section C: Construction of Triangles

5. a) [Rough sketch of a triangle with sides 6, 7, 8 cm]

5. b) [Rough sketch of a triangle with sides 5 cm and 6 cm, and the included angle 70°]

5. c) [Rough sketch of a triangle with base 7 cm and adjacent angles 60° and 80°]

End of Answer Keys