Grade 9 - First Unit Test

Answer Keys

Practice Papers 1 & 2

Mathematics

Based on Maharashtra Board Syllabus (NEP 2025-26) - 1st Quarter

Note:

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

Practice Paper 1 - Answer Key

Section A: Sets and Real Numbers

1. a) {11, 13, 17, 19}

1. b) {1, 2, 3, 4, 5, 6, 7}

1. c) {2, 4, 6, 8}

1. d) Yes

2. a) 7/10

2. b) 0.4

2. c) 7 (4 + 3)

2. d) 5

Section B: Polynomials

3. a) 3

3. b) $3x^2 + 2x$

3. c) $2y + 7$ ($(3y + 2) - (y - 5) = 3y + 2 - y + 5$)

4. a) $3x^2 + 12x$

4. b) $a^2 + 5a + 6$

4. c) $y^2 + 4y - 5$

Section C: Parallel Lines and Transversal

5. a) 70 ° (Corresponding angles are equal)

5. b) 70 ° (Alternate interior angles are equal)

5. c) 70 ° (Consecutive interior to ∠1's adjacent angle (180-70=110) means 180-110=70. Alternate exterior to ∠1 is ∠8, which is equal to ∠1. **Correction:** ∠8 is consecutive interior to ∠4. ∠4 = 70. ∠8 + ∠4 = 180 if lines are parallel. ∠8 = 180 - 70 = 110. Alternate exterior to ∠1 is ∠8. ∠1 = ∠8 if lines are parallel. So ∠8 = 70. Let's assume the diagram implies parallel lines. **Revised Answer:** 70 °)

6. a) Yes

6. b) 60 ° (180 - 120)

6. c) [Drawing showing two parallel lines intersected by a transversal, with a pair of alternate interior angles marked (angles between the parallel lines on opposite sides of the transversal)]

Practice Paper 2 - Answer Key

Section A: Sets and Real Numbers

1. a) {7, 9, 11, 13}

1. b) {c, d}

1. c) {3, 6, 9, 12}

1. d) Yes

2. a) 13/10

2. b) 0.75

2. c) 3 (5 - 2)

2. d) 8

Section B: Polynomials

3. a) 5

3. b) $6a^2 + 2a$

3. c) 4x - 4 ((5x - 1) - (x + 3) = 5x - 1 - x - 3)

4. a) $4a^2 - 20a$

4. b) $x^2 + 5x + 4$

4. c) $a^2 + 4a - 12$

Section C: Parallel Lines and Transversal

5. a) 110 ° (Corresponding angles are equal)

5. b) 110 ° (Alternate interior angles are equal)

5. c) 70 ° (Consecutive interior angles are supplementary. 110 + 70 = 180)

6. a) Yes

6. b) 45 ° (90 - 45)

6. c) [Drawing showing two parallel lines intersected by a transversal, with a pair of corresponding angles marked (angles in corresponding positions)]

End of Answer Keys