

Grade 7 - 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: Operations on Rational Numbers

1. a) $\frac{1}{4}$ ($\frac{3}{4} - \frac{2}{4}$)
1. b) $\frac{3}{6}$ or $\frac{1}{2}$ ($\frac{5}{6} - \frac{2}{6}$)
1. c) $-\frac{8}{15}$
1. d) -1 ($\frac{3}{7} * -\frac{14}{6} = \frac{3}{7} * -\frac{7}{3} = -1$)
2. a) $-\frac{9}{5}$
2. b) Yes
2. c) $\frac{18}{10}$ or $\frac{9}{5}$
2. d) 1

Section B: Simple Equations and Lines & Angles

3. a) $x = 4$ ($2x = 11 - 3 = 8$)

3. b) $y = 3$ ($5y = 13 + 2 = 15$)

3. c) $p = 15$ ($p/3 = 4 + 1 = 5$)

4. a) They are equal.

4. b) 60° ($90 - 30$)

4. c) [Drawing of a transversal intersecting two lines, showing a pair of angles in corresponding positions (e.g., top-left and top-left)]

Section C: Properties of Triangles

5. a) two non-adjacent

5. b) 70° ($180 - 50 - 60$)

5. c) 90°

6. a) No ($50 + 60 + 70 = 180$, so yes, it can. ****Correction:**** The sum of angles must be 180. $60 + 70 + 50 = 180$. So, Yes. ****Revised Answer:**** Yes)

6. b) Scalene triangle (****Correction:**** Sides are 3, 4, 5. All different. So, Scalene. ****Revised Answer:**** Scalene triangle)

6. c) [Drawing of a triangle with two equal sides marked]

Practice Paper 2 - Answer Key

Section A: Operations on Rational Numbers

1. a) $-3/6$ or $-1/2$ ($-4/6 + 1/6$)

- 1. b) $\frac{5}{8}$ ($\frac{7}{8} - \frac{2}{8}$)
- 1. c) $-\frac{24}{36}$ or $-\frac{2}{3}$
- 1. d) $-\frac{120}{120}$ or -1 ($-\frac{5}{12} * \frac{24}{10} = -\frac{5}{12} * \frac{12}{5} = -1$)
- 2. a) $-\frac{11}{7}$
- 2. b) 1
- 2. c) $\frac{1}{8}$ ($\frac{125}{1000}$ simplifies to $\frac{1}{8}$)
- 2. d) -1

Section B: Simple Equations and Lines & Angles

- 3. a) $a = 5$ ($4a = 15 + 5 = 20$)
- 3. b) $b = 3$ ($6b = 22 - 4 = 18$)
- 3. c) $q = 20$ ($\frac{q}{5} = 6 - 2 = 4$)
- 4. a) They are supplementary (sum is 180°).
- 4. b) 60° ($180 - 120$)
- 4. c) [Drawing of a transversal intersecting two lines, showing a pair of alternate interior angles (e.g., bottom-left on one line and top-right on the other)]

Section C: Properties of Triangles

- 5. a) non-adjacent
- 5. b) 90° ($180 - 45 - 45$)
- 5. c) opposite
- 6. a) Yes ($60 + 70 + 50 = 180$)
- 6. b) Isosceles triangle (Two sides are equal)
- 6. c) [Drawing of a triangle with one angle marked as 90 degrees]

End of Answer Keys

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