Grade 7 - Final Exam

Practice Paper 2

Mathematics

Based on Maharashtra Board Syllabus (NEP 2025-26) - Full Syllabus

Instructions:

- Duration: 2 hours
- Maximum marks: 50
- All questions are compulsory
- Show all your working clearly

Section A: Rational Numbers and Integers (10 Marks)

1. Solve the following: **[5 marks]**

a) Add: (-15) + (-10) = _____

b) Subtract: (-8) - 12 = _____

c) Multiply: 7 × (-9) = _____

d) Divide: 48 ÷ (-6) = _____

e) Write the multiplicative inverse of -7/8. = _____

2. Solve the following operations on rational numbers: **[5 marks]**

a) Add: (-1/4) + 2/3 = _____

b) Subtract: 5/6 - 1/4 = _____

c) Multiply: (3/5) × (-10/9) = _____

d) Divide: (-2/7) ÷ (4/14) = _____

e) Convert 0.875 into a rational number (fraction in simplest form). = _____

Section B: Indices and Algebraic Expressions (10 Marks)

3. Solve the following using laws of indices: **[5 marks]**

a) $4^3 \times 4^5$ = _____

b) $12^{10} \div 12^6$ = _____

c) $(6^4)^2$ = _____

d) $(x^5)^4$ = _____

e) Write 81 in index form with base 3. = _____

4. Solve the following algebraic expressions: **[5 marks]**

a) Add: (6a - 4b) + (3a + 7b) = _____

b) Subtract: (12p + 5q) - (8p - 2q) = _____

c) Simplify: 4(m - 3) + 5m = _____

d) Find the value of $y^2 - 5y + 6$ when y = 4. = _____

e) Identify the constant term in the expression $5x^2 - 3x + 7$. = _____

Section C: Simple Equations and Geometry (10 Marks)

5. Solve the following simple equations: **[5 marks]**

a) a + 15 = 40. Find a. = a = _____

b) b - 10 = 22. Find b. = b = _____

c) 6c = 54. Find c. = c = _____

d) r/7 = 6. Find r. = r = _____

e) 4x - 3 = 21. Find x. = x = _____

6. Answer the following geometry questions: **[5 marks]**

a) If two lines intersect, the vertically opposite angles are _____. (equal/ unequal)

b) If two angles are complementary and one is 70°, find the other. = _____ °

c) If two angles are supplementary and one is 45°, find the other. = _____ °

d) What is the relationship between consecutive interior angles when a transversal intersects two parallel lines? = _____

e) Draw a rough sketch of two parallel lines intersected by a transversal.

Section D: Properties of Triangles and Measurement (20 Marks)

7. Answer the following triangle questions: **[5 marks]**

a) The sum of angles in a triangle is _____ degrees.

b) If the angles of a triangle are 60°, 60°, and z°, find z. = z = _____ °

c) In an isosceles triangle, if two angles are 50° and 50°, what is the measure of the third angle? = _____ °

d) If two sides of a triangle are 3 cm and 7 cm, the third side must be between _____ cm and _____ cm.

e) Can a triangle have sides 5 cm, 7 cm, 10 cm? (Yes/No) = _____

8. Calculate the perimeter and area of the following shapes: **[5 marks]**

a) A square with side 18 cm. = Perimeter: _____ cm, Area: _____ sq cm

b) A rectangle with length 30 cm and width 15 cm. = Perimeter: _____ cm, Area: _____ sq cm

9. Convert the following measurements: **[5 marks]**

a) 12 km 300 m to meters. = _____ m

b) 5 liters 800 ml to milliliters. = _____ ml

c) 10 kg 50 g to grams. = _____ g

d) 3 hours 15 minutes to seconds. = _____ seconds

e) ₹20.75 to paise. = _____ paise

10. Word Problems: **[5 marks]**

a) The difference between two integers is 5. If one integer is -3, find the other integer. (Two possible answers) = _____ or _____

b) A fruit vendor bought mangoes for ₹600 and sold them for ₹550. Find the loss. = ₹_____

c) A student spends 1/4 of his money on books and 1/8 on stationery. What fraction of his money did he spend in total? = _____

d) If the temperature is -5°C and it drops by 4°C, what is the new temperature? = _____ °C

e) A car travels 300 km in 5 hours. What is its average speed in meters per minute? = _____ m/min

End of Practice Paper 2