Grade 7 - Final Exam

Practice Paper 1

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: (-20) + 15 = _____

b) Subtract: 18 - (-7) = _____

c) Multiply: (-9) × 6 = _____

d) Divide: (-54) ÷ (-9) = _____

e) Write the additive inverse of 25. = _____

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

a) Add: 1/3 + (-2/5) = _____

b) Subtract: 3/4 - 1/6 = _____

c) Multiply: (-4/7) × (14/8) = _____

d) Divide: (5/9) ÷ (-10/27) = _____

e) Convert 3.25 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) $5^2 \times 5^6$ = _____

b) $10^9 \div 10^4$ = _____

c) $(7^3)^5$ = _____

d) $(a^4)^3$ = _____

e) Write 64 in index form with base 4. = _____

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

a) Add: (5x + 3y) + (2x - 4y) = _____

b) Subtract: (8a - 2b) - (3a + 5b) = _____

c) Simplify: 3(p + 2) + 4p = _____

d) Find the value of $2m^2 + 3m - 1$ when m = 2. = _____

e) Identify the coefficient of y in the term -7xy. = _____

Section C: Simple Equations and Geometry (10 Marks)

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

a) x + 9 = 20. Find x. = x = _____

b) y - 6 = 15. Find y. = y = _____

c) 4z = 36. Find z. = z = _____

d) p/5 = 8. Find p. = p = _____

e) 2a + 5 = 17. Find a. = a = _____

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

a) If two lines intersect, the sum of adjacent angles is _____ degrees.

b) If two angles are complementary and one is 35°, find the other. = _____ °

c) If two angles are supplementary and one is 140°, find the other. = _____ °

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

e) Draw a rough sketch of a pair of vertically opposite angles and mark them.

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

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

a) What is the sum of interior angles of a triangle? = _____ °

b) If the angles of a triangle are 40°, 70°, and x°, find x. = x = _____ °

c) In a right-angled triangle, the side opposite the right angle is called the _____.

d) If two sides of a triangle are 6 cm and 8 cm, the third side must be between _____ cm and _____ cm.

e) Can a triangle have angles 50°, 60°, 80°? (Yes/No) = _____

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

a) A square with side 10 cm. = Perimeter: _____ cm, Area: _____ sq cm

b) A rectangle with length 20 cm and width 8 cm. = Perimeter: _____ cm, Area: _____ sq cm

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

a) 5 km to meters. = _____ m

b) 2.5 liters to milliliters. = _____ ml

c) 3 kg 200 g to grams. = _____ g

d) 1 hour 45 minutes to minutes. = _____ minutes

e) 800 paise to rupees. = ₹_____

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

a) The sum of two integers is -10. If one integer is 4, find the other integer. = _____

b) A shopkeeper bought a book for ₹200 and sold it for ₹250. Find the profit. = ₹_____

c) A recipe requires 1/2 cup of sugar. If you want to make half the recipe, how much sugar do you need? = _____ cup

d) If the temperature is -2°C and it rises by 5°C, what is the new temperature? = _____ °C

e) A train travels at a speed of 70 km/hr. How much distance will it cover in 3 hours? = _____ km

End of Practice Paper 1

© 2025 Math Solver