Grade 9 - Terminal Exams

Answer Key

Mathematics

Section A: Number Operations

1. Solve the following:

a) 7,834 + 5,978 = 13,812

b) 9,432 - 6,789 = 2,643

c) 567 × 24 = 13,608

d) 3,696 ÷ 16 = 231

e) 5^3 = 125

2. Arrange the following fractions in ascending order:

1/2, 2/5, 7/10, 3/4, 4/5

Explanation: Converting to decimals: 1/2 = 0.5, 2/5 = 0.4, 7/10 = 0.7, 3/4 = 0.75, 4/5 = 0.8

Section B: Fractions and Decimals

3. Convert the following:

a) 3/8 to decimal = 0.375

b) 0.75 to fraction in simplest form = 3/4

c) 0.125 to fraction in simplest form = 1/8

d) 7/20 to decimal = 0.35

e) 0.36 to fraction in simplest form = 9/25

4. Solve the following:

a) 2/3 + 1/6 = 4/6 + 1/6 = 5/6

b) 5/8 - 1/4 = 5/8 - 2/8 = 3/8

c) 3/4 × 2/3 = 6/12 = 1/2

d) 2/5 ÷ 3/10 = 2/5 × 10/3 = 20/15 = 4/3

e) 1.25 + 3.75 = 5.00

Section C: Geometry and Measurement

5. Calculate the perimeter and area of a rectangle with length 12 cm and width 8 cm.

Perimeter = 2(l + w) = 2(12 + 8) = 2(20) = 40 cm

Area = l × w = 12 × 8 = 96 cm^2

6. Calculate the perimeter and area of a square with side length 9 cm.

Perimeter = 4s = 4 × 9 = 36 cm

Area = $s^2 = 9^2 = 81$ cm²

7. A circular garden has a radius of 7 meters. Calculate its circumference and area. (Use π = 22/7)

Circumference = $2\pi r = 2 \times 22/7 \times 7 = 44$ meters

Area = $\pi r^2 = 22/7 \times 7^2 = 22/7 \times 49 = 154$ m²

Section D: Word Problems

8. Ravi bought 3 1/2 kg of apples, 2 3/4 kg of oranges, and 1 1/4 kg of grapes. What is the total weight of the fruits he bought?

Total weight = 3 1/2 + 2 3/4 + 1 1/4 = 3.5 + 2.75 + 1.25 = 7.5 kg

9. A rectangular playground is 25 meters long and 15 meters wide. Find the cost of fencing the playground at the rate of ₹125 per meter.

Perimeter of playground = 2(l + w) = 2(25 + 15) = 2(40) = 80 meters

Cost of fencing = 80 × 125 = ₹10,000

10. Meera had ₹2,500. She spent 3/5 of her money on books and 1/4 of the remaining on stationery. How much money does she have left?

Money spent on books = 3/5 × 2,500 = 1,500

Money remaining after buying books = 2,500 - 1,500 = 1,000

Money spent on stationery = 1/4 × 1,000 = 250

Money left = 1,000 - 250 = ₹750

End of Answer Key