Class 4 Mathematics Advanced Word Problems (Original Set)

Topic: Advanced Measurement (Length, Weight, & Volume)

Q1. A chef prepares a big pot of soup that contains 8 litres of broth. During lunch, he serves 12 customers with bowls that hold 450 ml of soup each. How much soup is left in the pot at the end of lunch?

Q2. A bridge has a strict safety weight limit of 2 tonnes (2,000 kg). A delivery van weighing 1,250 kg is loaded with 15 heavy boxes. If each box weighs 52 kg, can the van safely drive across the bridge? Explain with calculation.

Q3. Neha is making a custom borders for 3 identical square paintings. The side of each square painting is 65 cm long. If she buys a single roll of framing tape that is 8 metres long, how many centimetres of tape will she have left over?

Q4. An oil drum contains 25 litres of oil. A mechanic draws out 4 L 250 ml on Monday and 6 L 800 ml on Tuesday. The remaining oil is poured equally into 5 small bottles. How much oil does each small bottle contain?

Q5. A small fruit crate holds 12 packs of strawberries. Each pack of strawberries weighs 350 grams. If the empty wooden crate itself weighs 600 grams, what is the total weight of the fully packed crate in kilograms and grams?

Q6. Rohan wants to participate in a 5 km walking race. He practices on a rectangular track that is 180 metres long and 70 metres wide. How many complete rounds of this track must Rohan walk to complete his 5 km target?

Q7. A water dispenser tank holds 18 litres of water. It leaks a tiny amount of 5 ml of water every minute. If the leak goes unnoticed for exactly 4 hours, how much water is left in the tank?

Q8. A school canteen buys a 20 kg sack of flour. In the first week, they use 5 kg 450 g. In the second week, they use 2 kg 800 g more than the first week. How much flour is left in the sack at the start of the third week?

Q9. To create a temporary fence, a gardener places 6 wooden posts in a straight line. The distance between any two consecutive posts is exactly 1 m 45 cm. What is the total distance from the very first post to the very last post?

Q10. A juice shop owner mixes 3 L 400 ml of pineapple juice, 2 L 850 ml of mango juice, and some orange juice to fill a large 8-litre dispenser completely. Exactly how much orange juice did the owner add to the mix?

1. 2 L 600 ml (Total served = 12 × 450 ml = 5,400 ml = 5 L 400 ml. Remaining = 8 L - 5 L 400 ml = 2 L 600 ml)

2. No, it is unsafe. (Total weight of boxes = 15 × 52 kg = 780 kg. Total loaded van weight = 1,250 kg + 780 kg = 2,030 kg. This exceeds the 2,000 kg limit by 30 kg)

3. 20 cm (Perimeter of 1 painting = 65 cm × 4 = 260 cm. For 3 paintings = 260 × 3 = 780 cm. Roll length = 800 cm. Leftover = 800 cm - 780 cm = 20 cm)

4. 2 L 790 ml (Total oil removed = 4,250 ml + 6,800 ml = 11,050 ml. Remaining oil = 25,000 ml - 11,050 ml = 13,950 ml. Each bottle = 13,950 ml ÷ 5 = 2,790 ml)

5. 4 kg 800 g (Weight of strawberries = 12 × 350 g = 4,200 g. Total weight = 4,200 g + 600 g = 4,800 g = 4 kg 800 g)

6. 10 rounds (Perimeter of track = 2 × (180 + 70) = 500 metres. Total race distance = 5,000 metres. Total rounds = 5,000 ÷ 500 = 10 rounds)

7. 16 L 800 ml (4 hours = 4 × 60 = 240 minutes. Water leaked = 240 × 5 ml = 1,200 ml = 1 L 200 ml. Leftover = 18 L - 1 L 200 ml = 16 L 800 ml)

8. 6 kg 300 g (Week 1 used = 5,450 g. Week 2 used = 5,450 g + 2,800 g = 8,250 g. Total used = 5,450 g + 8,250 g = 13,700 g. Leftover = 20,000 g - 13,700 g = 6,300 g)

9. 7 m 25 cm (With 6 posts in a line, there are exactly 5 spaces between them. Total distance = 5 × 1 m 45 cm = 5 × 145 cm = 725 cm = 7 m 25 cm)

10. 1 L 750 ml (Juice already mixed = 3,400 ml + 2,850 ml = 6,250 ml. Total dispenser capacity = 8,000 ml. Orange juice needed = 8,000 ml - 6,250 ml = 1,750 ml)