CHAPTER-3 | Proportional Reasoning-2

QUIZ PART-04

1. Dividing a whole in a given ratio means distributing a quantity according to:
   A. Equal parts only
   B. Given ratio parts
   C. Random parts
   D. Fractions only (B)

Explanation : A whole quantity is divided according to the ratio provided.

2. In Example-3, cement, sand, and gravel are mixed in the ratio:
   A. 1 : 2 : 3
   B. 2 : 3 : 5
   C. 1 : 1.5 : 3
   D. 1 : 3 : 5 (C)

Explanation: The concrete mixture uses the ratio 1 : 1.5 : 3.

3. The total number of ratio parts in 1 : 1.5 : 3 is:
   A. 4
   B. 4.5
   C. 5
   D. 5.5 (D)

Explanation: 1 + 1.5 + 3 = 5.5 parts.

4. If 110 units of concrete are divided in the ratio 1 : 1.5 : 3, one ratio part equals:
   A. 10 units
   B. 20 units
   C. 30 units
   D. 40 units (B)

Explanation: 110 ÷ 5.5 = 20 units per part.

5. In Example-3, the amount of cement required is:
   A. 20 units
   B. 30 units
   C. 40 units
   D. 60 units (A)

Explanation : Cement = 1 × 20 = 20 units.

6. In Example-3, the amount of gravel required is:
   A. 20 units
   B. 30 units
   C. 60 units
   D. 90 units (C)

Explanation : Gravel = 3 × 20 = 60 units.

7. Purple paint is prepared in the ratio Red : Blue : White =
   A. 1 : 1 : 1
   B. 2 : 3 : 5
   C. 1 : 2 : 3
   D. 3 : 5 : 2 (B)

Explanation : The chapter uses the ratio 2 : 3 : 5 for purple paint.

8. If 50 ml of purple paint is needed, the amount of white paint required is:
   A. 10 ml B. 15 ml
   C. 20 ml D. 25 ml (D)

Explanation : Total parts = 10. One part = 50 ÷ 10 = 5 ml. White = 5 parts = 25 ml.

9. A triangle has angles in the ratio 1 : 3 : 5. The largest angle is:
   A. 20°
   B. 40°
   C. 60°
   D. 100° (D)

Explanation : Total parts = 9. One part = 180° ÷ 9 = 20°. Largest angle = 5 × 20° = 100°.

10. If the angles of a quadrilateral are in the ratio 2 : 3 : 5 : 8, then ∠D is:
    A. 40°
    B. 50°
    C. 80°
    D. 160° (D)

Explanation : Total parts = 18. One part = 360° ÷ 18 = 20°. ∠D = 8 × 20° = 160°.