University BORAMA

Faculty: ……social work…………….. ID: …1040………………..

Individual Assignment – 30 Marks

Submission Date: 05-05-2025

Answers:

1. 12:16 in simplest form = 3:4

2. Divide $120 in the ratio 2:3:
- Total parts = 5
- $120 ÷ 5 = $24
- 2 parts = $48, 3 parts = $72

3. Ratio of cats to dogs is 4:7, 28 dogs ? cats = (4/7) × 28 = 16 cats

4. $240 for 8 hours ? pay per hour = $240 ÷ 8 = $30

5. Are 6:9 and 8:12 proportional? Yes, both simplify to 2:3

6. 3 shirts = $45 ? 5 shirts = (5/3) × $45 = $75

7. 12 pens cost $10 ? 1 pen = $10 ÷ 12 = $0.83 (approx.)

8. A class has 18 boys and 12 girls ? ratio of boys to total = 18:30 = 3:5

9. 25% of 480 = (25/100) × 480 = 120

10. $150 after 20% discount ? original price = $150 ÷ 0.8 = $187.50

11. 5% commission on $2,000 = 0.05 × 2000 = $100

12. 60% of a number is 180 ? original number = 180 ÷ 0.6 = 300

13. Simple Interest = (1200 × 5 × 3) / 100 = $180

14. Compound Interest: A = 2000 × (1 + 0.10)^3 = $2,662

15. Compound Interest: A = 2000 × (1 + 0.06)^2 = $2,247.20