

ALPHA UNIVERSITY BORAMA

Assignment of Math's Methods

Individual Assailment - 30 Marks

Submission Date: 05-05-2025

Name: _____ Faculty: _____ ID: _____

1. Express the ratio 12:16 in its simplest form.

Answer: $12:16 = 3:4$

2. Divide \$120 in the ratio 2:3.

Answer: \$48 and \$72

3. The ratio of cats to dogs in a pet shop is 4:7. If there are 28 dogs, how many cats are there?

Answer: 16 cats

4. If a person earns \$240 for working 8 hours, what is the rate of pay per hour?

Answer: \$30/hour

5. Are the ratios 6:9 and 8:12 proportional?

Answer: Yes, both simplify to 2:3

6. If 3 shirts cost \$45, how much would 5 shirts cost at the same rate?

Answer: \$75

7. If 5 pens cost \$10, how much do 12 pens cost?

Answer: \$24

8. A class has 18 boys and 12 girls. What is the ratio of boys to the total number of students?

Answer: 3:5

9. Find 25% of 480.

Answer: 120

10. A jacket is sold for \$150 after a 20% discount. What was the original price?

Answer: \$187.50

11. A salesperson earns a 5% commission on sales. If they sell goods worth \$2,000, how much commission do they earn?

Answer: \$100

12. If 60% of a number is 180, what is the original number?

Answer: 300

13. Find the simple interest on \$1,200 at a rate of 5% per annum for 3 years.

Answer: \$180

14. A sum of \$2,000 is invested at 10% per annum for 3 years compounded annually. Find the total amount.

Answer: \$2,662

15. A loan of \$2,000 is given for 2 years at a rate of 6% per annum. What is the total amount to be repaid at the end of the period?

Answer: \$2,240