

# ALPHA UNIVERSITY BORAMA

## Assignment of Math's Methods

Name: ..... Faculty: ..... ID: .....

Individual Assignment - Total Marks: 30

Submission Date: 05-05-2025

1. Express the ratio 12:16 in its simplest form:
2. Divide \$120 in the ratio 2:3:
3. The ratio of cats to dogs is 4:7. If there are 28 dogs, how many cats?
4. If a person earns \$240 for 8 hours, what is the rate of pay per hour?
5. Are the ratios 6:9 and 8:12 proportional?
6. If 3 shirts cost \$45, how much would 5 shirts cost?
7. If 5 pens cost \$10, how much do 12 pens cost?
8. A class has 18 boys and 12 girls. What is the ratio of boys to the total number of students?

9. Find 25% of 480:

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

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

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

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

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

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?