ALPHA UNIVERSITY BORAMA   
Assignment of Maths Methods   
Name: Farhan Aden Ibrahim   
Faculty: social work   
ID: ID/25/590

The Assignment   
Individual Assignment The assignment: 30 marks Submission Date: 05-05-2025

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

= 3:4 (Divide both numbers by 4)   
2. Divide $120 in the ratio 2:3.

= Total parts = 5  
 = $120 5 = $24  
 = $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?

= 16 cats   
4. If a person earns $240 for working 8 hours, what is the rate of pay per hour?

= $30/hour   
5. Are the ratios 6:9 and 8:12 proportional?

= Yes, both equal 2/3   
6. If 3 shirts cost $45, how much would 5 shirts cost at the same rate?

= $75   
7. If 5 pens cost $10, how much do 12 pens cost?

= $24   
8. A class has 18 boys and 12 girls. What is the ratio of boys to the total number of students?

= 3:5   
9. Find 25% of 480.

= 120   
10. A jacket is sold for $150 after a 20% discount. What was the original price?

= $187.50   
11. A salesperson earns a 5% commission on sales. If they sell goods worth $2,000, how much commission do they earn?

= $100   
12. If 60% of a number is 180, what is the original number?

= 300   
13. Find the simple interest on $1,200 at a rate of 5% per annum for 3 years.

= $180   
14. A sum of $2,000 is invested at 10% per annum for 3 years compounded annually. Find the total amount.

= $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?

= $2,240