ALPHA UNIVERSITY BORAMA

Assignment of math's methods

Name: Abdullahi Ali farah … faculty: Accounting and finance … ID : Dip/25/252

The assignment

Individual assailment the assignment 30 marks

Submission date 05-05-2025

Express the ratio 12:16 in its simplest form

12:16

3:4

Divide $120 in the ratio 2:3.

2/5

×

120 =48. 3/5

×

120= 72

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

4

×

28= 112

÷

7=16 cats

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

$240/8= $30 per hour

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

6:9.= 8:12

2:3 = 2:3

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

1 shirt = $45 ÷ 3 = $15

5 shirts = $15 × 5 = $75

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

1 pen = $10 ÷ 5 = $2

12 pens = 12 × $2 = $24

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

18+12=30

=18:30=3:5

Find 25% of 480.

25/100

×

480=120

10.

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

x - 0.2x = 150 ? 0.8x = 150 ? x = 150 ÷ 0.8 = $187.50

11.

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

commission do they earn?

5/100

×

2000 = $100

12.

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

0.6

×

x=180--x=180

÷

0.6=300

13.

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

Si=

P

×

R

×

T

÷

100

Si= 1200

×

5

×

3

÷

100=180

14.

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

A = P(1 + r/100)^t

A = 2000(1 + 10/100)^3 = 2000(1.1)^3 ? 2000 × 1.331 = $2662

Interest = 2662 - 2000 = $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?

A loan of $2000 for 2 years at 6% simple interest.

SI = 2000 × 6 × 2 ÷ 100 = $240

Total repayment = 2000 + 240 = $2240