



ALPHA UNIVERSITY BORAMA

Assignment of math's methods

Name: Adan Ali Yusuf faculty: Accounting and Finance ID=528

The assignment

Individual assignment the assignment 30 marks

Submission date 05-05-2025

Express the ratio 12:16 in its simplest form.

Ans: 3:4

Divide \$120 in the ratio 2:3.

Ans. $2/5 \times 120 = 48$

$3/5 \times 120 = 72$

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

Ans. $4/7 = 28/X$

Cat is = 49

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

Ans. $240/8 = 30$

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

Ans. $6:9/3 = 2:3$ and $8:12/4 = 2:3$

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

Ans. 1 shirt = $45/3 = 15$

5 shirt = $5 \times 15 = 75$

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

$$\text{Ans. } 1 \text{ pen} = 10/5 = 2$$

$$12 \text{ pens} = 12 * 2 = 24$$

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

$$\text{Ans. Total students} = 30$$

$$\text{Boys to total} = 18:30$$

Find 25% of 480.

$$\text{Ans. } 480 * 25 = 12000/100 = 120$$

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

$$\text{Ans. } (100\% - 20\%) * x = 150$$

$$\text{Original price: } 187.5$$

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

$$\text{Ans. } 2000 * 5\% = 100$$

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

Ans.

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

$$\text{Ans. } 5\% * 1200 * 1 = 60$$

$$5\% * 1200 * 2 = 120$$

$$5\% * 1200 * 3 = 180$$

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

$$10\% * 2000 = 200$$

$$10\% * 2200 = 2420$$

$$10\% * 2420 = 2662$$

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?

$$\text{Ans. } 2000 * 6\% * 2 = 240$$

$$2000 + 240 =$$

$$2240$$