**Zakarie aidid jama faculty:- accouting and finance iD:- 544**

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

Answer:

12:16 = 3:4 (Divide both numbers by 4)

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

Answer:

Total parts = 2 + 3 = 5

Each part = $120 ÷ 5 = $24

So: 2 parts = 2 × 24 = $48, 3 parts = 3 × 24 = $72

Result: $48 and $72

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

Answer:

If 7 parts = 28 dogs → 1 part = 4

So, cats = 4 parts = 4 × 4 = 16 cats

4. A person earns $240 for working 8 hours. What is the rate of pay per hour?

Answer:

$240 ÷ 8 = $30 per hour

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

Answer:

6:9 = 2:3, 8:12 = 2:3 → Yes, they are proportional

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

Answer:

1 shirt = $45 ÷ 3 = $15

5 shirts = 5 × 15 = $75

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

Answer:

1 pen = $10 ÷ 5 = $2

12 pens = 12 × 2 = $24

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

Answer:

Total = 18 + 12 = 30

Ratio = 18:30 = 3:5

9. Find 25% of 480.

Answer:

25% of 480 = (25/100) × 480 = 120

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

Answer:

Let original price be x.

x - 20% of x = 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?

Answer:

Commission = 5% of 2000 = (5/100) × 2000 = $100

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

Answer:

Let the number be x.

0.6x = 180 → x = 180 ÷ 0.6 = 300

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

Answer:

Simple Interest = (P × R × T)/100 = (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.

Answer:

Compound Interest Formula:

A = P(1 + r)^t = 2000(1 + 0.10)^3

= 2000 × (1.1)^3 = 2000 × 1.331 = $2,662

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 (simple interest)?

Answer:

Simple Interest = (2000 × 6 × 2)/100 = $240

Total = 2000 + 240 = $2,240