



ALPHA UNIVERSITY BORAMA

Assignment of math's methods

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The assignment: Individual assignments

Express the ratio 12:16 in its simplest form.

Answer:

12:16

=

3:4

Divide \$120 in the ratio 2:3.

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

=
16
cats
If a person earns \$240 for working 8 hours, what is the rate of pay per hour?
Answer: $$240 \div 8 = 30 per hour
Are the ratios 6:9 and 8:12 proportional?
If 3 shirts cost \$45, how much would 5 shirts cost at the same rate?
5
×
\$15
=

\$75
If 5 pens cost \$10, how much do 12 pens cost?



=

× \$2

= \$24

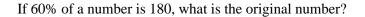
A class has 18 boys and 12 girls. What is the ratio of boys to the total number of students?

Ratio

18:30

=

3:5	
Find 25% of 480.	
A jacket is sold for \$150 after a 20% discount. What was the original price?	
A salesperson earns a 5% commission on sales. If they sell goods worth \$2,000, how much commission do the	ey earn?



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

Answer:

$$SI = (P \times R \times T) / 100 = (1200 \times 5 \times 3) / 100 = $180$$

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

Answer:

$$A = P(1 + r/100)^{t} = 2000(1 + 0.10)^{3} = 2000 \times 1.331 = $2,662$$

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?

Answer:

$$SI = (2000 \times 6 \times 2) / 100 = $240$$

$$Total = 2000 + 240 = $2,240$$