



rlZntAN

ALPHA UNIVERSITY

BORAMA

Assignment of math's methods

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The assignment

Individual assailment the assignment **30 marks**

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Express the ratio 12:16 in its simplest form.

A

NS

:3:

4

Divide \$120 in the ratio 2:3

A

NS

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2+3=5

then $2 \div 5 \times 12$

$$0=48$$

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

$$\text{Ans} = 4 \div 7 = x \div 28 = 7 \times = 112 \text{ each one } \div 7 = 16 \text{ there fore } 16 \text{ cats}$$

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

ANS

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rate per

$$h = 8 \times 240 \times 1 = 1920$$

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

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

Ans

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5 shirt c

$$\text{ost} = 45 \div 3 \times 5 =$$

&75

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

AN

S

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12 pen

$$\text{cost is } 10 \div 5 \times 12 = 24$$

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

$$\text{ANS: total ratio of student} = \text{sum boys and girls} = 30$$

Find 25% of 480.

AN

S :

$$\text{actual price } 25 \div 100 \times 480 = 120$$

$$\text{Selling price} = \text{cost price} + \text{profit} = 480 + 120 = 600$$

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

ANS:

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$$\text{original} =$$

$$\text{sale price} \div \text{discount} \times 100$$

$$= 150 \div 0.8 \times 100 = 187.5$$

11:

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

ANS

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$$\text{commission} = \text{Rate} \times \text{Sales} = 5 \div 100 \times 2000 = 100$$

12 : i

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

A

NS

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$$100 - 60 = 40\% = 0.40 = 0.40 \times 180 \text{ original} = 72$$

13:

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

Ans

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$$\text{first } 5\% \times 1200 \times 1 = 60$$

$$\text{Secondy } 5\% \times 1$$

$$200 \times 2 = 120$$

$$\text{Thirdy } 5\% \times 1200 \times 3 = 180$$

14:

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

t

$$\text{ANS:total} = 10\% \times 10000 = 1000 \text{ so } 20000 + 1000 = 2100$$

$$\text{b. } 10\% \times 1000 = 100 \text{ so } 2100 + 100 = 2200$$

$$\text{C : } 10\% \times 1000 = 100 \text{ there fore } = 2200 + 100 = 2300$$

$$\text{Total num} = 2300$$

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?

$$\text{ANS: } 6\% \times 1000 = 60 \text{ then } 2000 + 60 = 2060$$

$$6\% \times 10000 = 2060 + 60 \text{ so the total number} = 2120$$