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.

12:16

3:4

Divide $120 in the ratio 2:3.

solution

add the ratios 2+3=

to find the number of ratio 2 $\dfrac{2 \times 120}{5}$ = 48

to find the number of ratio 3 $\dfrac{3 \times 120}{5}$ = 72

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

Solution

Let x is number of cats

$\dfrac{4}{7}$ x $\dfrac{7x=112}{28}$ 16 cats

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

Solution

$\dfrac{240}{8} = 30$ per hour

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

6:9 and 8:12

2:3 2:3

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

$\dfrac{45}{3} = 15$

5x15=75 5shirts cost will be 75

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

10/5 = 2 12x2 = 24 12 pens cost will 24

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

the ratio of the total number of students is 18+12 = 30 18:30 = 3:5

Find 25% of 480.

Answer

$\dfrac{25 \times 480}{100} = 120$

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

Let original price = x
20% of x = discount ? Selling price = x - 0.2x = 0.8x
0.8 = 150 ? x = 150/0.8=187.5= 187.5
? $187.50

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

$\dfrac{5?\times2000=100}{100}$

100 commission

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

0.6x180 $x=\dfrac{180}{0.6}= 300$

0.6 0.6

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

Si= p*r*t $\dfrac{1200*5*3}{}$ 180

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

Solution

Year	Amount at beginning of year	Compound interest	Amount end year
1	$2000	10%2000=200	2000+200=2200
2	2200	10%2200=220	2200+220=2420
3	2420	10%2420=242	2420+242=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?

Sim=p*r*t 2000*6*2 240

100