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Answers:

ratio =12:16

$12/2=6$ $16/2=8$

$6/2=3$ $8/2=4$

its simplest from 3:4

2) divide 120\$ in the ratio 3:2

$2+3=5$

$120/5=24$

3) the ratio of cats to dogs in a pet shop is 4:7 if there are 28 dogs. How many cats are there?

Ans: ratio: cats and dogs 4:7

$(28 \times 4) \div 7$

$= 112 \div 7$

$= 16$ cats

4) if person earns 240\$ for working 8hr what is the rate of pay per hr?

Ans: $240/8=30$

Working Per hr= 30\$

5) are the ratio: 6:9 and 8:12 proportional?

Ans: $6/3=2$ $9/3=3$

2:3

8:12

$8/4=2$ $12/4=3$

Proportional 2:3

6) if 3 shirts costs 45\$ how much would 5shirts at the same rate?

Ans: 3 shirts 45\$

$$45/3=15$$

$$1\text{shirt}= 15\$$$

$$5*15=75$$

$$5\text{shirts}= 75\$$$

7) if 5 pens costs 10\$ how much do 12 pens?

Ans: 5pens=10

$$10/5=2\$$$

$$1\text{pen}= 2\$$$

$$12*2=24$$

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

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

Ans :

$$\text{Total students}= 18+12=30$$

$$18:30$$

$$18/6=3$$

$$30/6=5$$

Ratio of boys 3:2

9) find 25% of 480?

$$25/100=0.25$$

$$0.25*480=120$$

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

$$\text{Ans: original price: } 150/0.80=187.5$$

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

11) A sale person earns a 5% commission on sale. If they sell goods worth 2000. How much commission do they earn?

$$\text{Ans: } 5/100=0.05$$

$$0.05*2000=100$$

$$\text{Commission} = 100\$$$

12) if 60% of a number is 180, what is the original number?

$$60/100=0.6$$

$$180/0.6=300$$

$$\text{Original number} = 300$$

13) find the simple interest on 1200\$ at rate of 5%

Per annum for 3yrs?

$$(P*R*T)/100$$

$$(1200\$*5*3)/100=\$180.$$

$$\text{Simple interest} = 180\$$$

14) A sum of 2,000\$ invested at 10% per annum for 3yrs compounded annually. Find the total amount?

$$\text{Ans: } 2000*(1+0.10)^3=2,662$$

$$\text{Total amount} = 2662$$

15) A loan of 2000 is given for 2yrs at a rate of 6% per annum. What is the total amount to be repaid at the end of the period?

$$\text{Simple Interest} = (2000 * 6 * 2)/100 = \$240$$

$$\text{Total} = 2000 + 240 = \$2240$$