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* **Answers:**

1. 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 × 4) ÷ 7

       = 112 ÷ 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

1shirt= 15$

5\*15=75

5shirts= 75$

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

Ans: 5pens=10

10/5=2$

1pen= 2$

12\*2=24

12pens= 24

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

Ans :

Total students= 18+12=30

18:30

18/6=3

30/6=5

Ratio of boys 3:2

9) fine 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?

Ans: original price: 150/0.80=187.5

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?

Ans: 5/100=0.05

0.05\*2000=100

Commission =100$

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

60/100=0.6

180/0.6=300

Original number= 300

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

Per annum for 3yrs?

(P\*R\*T)/100

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

Simple interest = 180$

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

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

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?

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

Total = 2000 + 240 = $2240