



**ALPHA UNIVERSITY BORAMA**

### **Assignment of math's methods**

**Name: Sagal Mohamed Abdi**

**Faculty..Social worker .... ID.. 469**

**The assignment**

**Individual assailment the assignment 30marks**

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Express the ratio 12:16 in its simplest form.

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?

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

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

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

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 they earn?

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

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

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

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?

12:16 in simplest form

Divide \$120 in the ratio 2:3

Cats to dogs = 4:7, dogs = 28

\$240 for 8 hours

Are 6:9 and 8:12 proportional?

3 shirts = \$45 ? 1 shirt = \$15 ? 5 shirts =  $5 \times 15 = \$75$

5 pens = \$10 ? 1 pen = \$2 ? 12 pens =  $12 \times \$2 = \$24$

18 boys + 12 girls = 30 students

25% of 480 =  $0.25 \times 480 = 120$

Sold for \$150 after 20% discount ? 80% of price = \$150

$$5\% \text{ of } \$2000 = 0.05 \times 2000 = \$100$$

$$60\% \text{ of number} = 180 \Rightarrow 0.6x = 180$$

$$\text{Simple Interest} = (P \times R \times T)/100$$

Compound Interest

Simple Interest for 2 years at 6% per annum

