UNIT 14: ALGEBRA



Forming and solving equations.

Example

A boy is 2 years older than his sister. Their total age is 20 years. How old is the sister?

Let the sister's age be x

Sister	Boy	Total
X	x + 2	20 yrs

$$So x + x + 2 = 20 years$$

Therefore
$$2x + 2 = 20$$
 years
 $2x + 2 - 2 = 20 - 2$
 $1\frac{2x}{2} = \frac{18}{2}$
 $1 = 2$
 $1 = 2$

Age of the sister is = 9 yrs

Exercise 14:31 Attempt the following:

- 1. Okello has **7** more cows than Mugisha. Altogether they have **19** cows How many cows does Mugisha have ?
- 2. Namuwenge got 6 more books than her brother. Altogether they got 2 books. How many books did the brother get?
- 3. Nguga's daughter is **7** years older than the son. Their total age is **27** years. How old is the son?
- 4. Aisha has 5 more goats than Ruth. Altogether they have 31 goats.
 - (a) How many goats has Ruth?
 - (b) How many goats has Aisha?
- 5. Mutenyo is 8 years younger than his eldest sister. Their total age is 24 years. How old is the eldest sister?
- 6. A man earns sh. 2,000 less than his wife daily. Their total income is sh. 8,000.
 - (a) How much does the wife earn daily?
 - (b) How much does the man earn daily?
- 7. Mudde is twice as old as his sister. Their total age is 48.
 - (a) How old is Mudde?
 - (b) How old is his sister?
- 8. There are 20 more cows in Okot's farm than in Okello's. If the total number of cows is 60, how many cows does each of them have?
- 9. Sarah has 400 more chicken than John. Their total number of chickens is 2,000. How many chickens does each have?