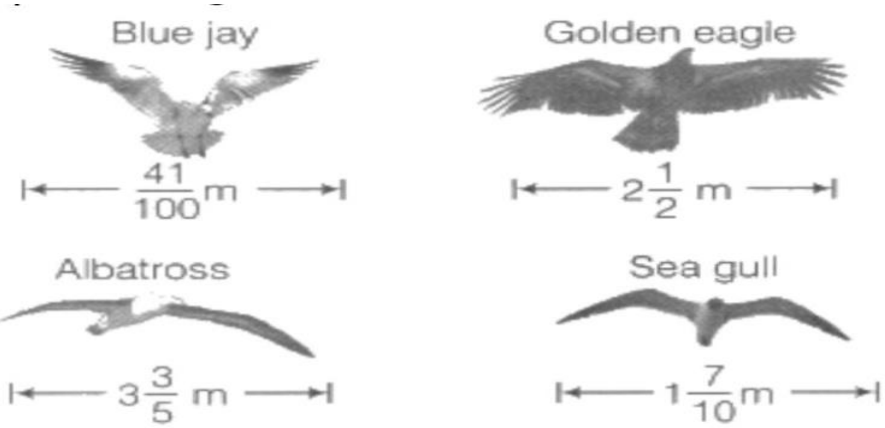
Class VIII

Case based problems

Chapter 1: Rational Numbers

Date : 29/04/2024

1. The diagram shows the wingspans of different species of birds. Use the diagram to answer the question given below :



(i) Write the name of the species according to their wingspan in descending order.
(ii) How much longer is the wingspan of an Albatross than the wingspan of a Sea gull?
(iii) How much longer is the wingspan of a Golden eagle than the wingspan of a Blue jay?

2. Read the information carefully and answer the questions given below :

Five friends had a competition to see how far could they hop on one foot. The table given shows the distance covered by each.

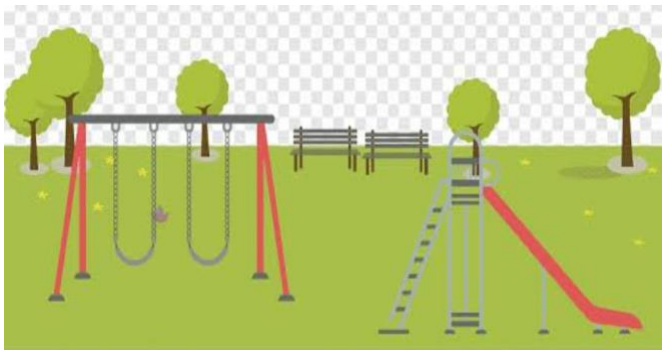
Name	Distance covered in km
Reena	1/32
Meena	1/25
Sima	1/40
Mita	1/16
Shampa	1/20

(i) How far did Mita hop than Meena?
(ii) What is the total distance covered by Reena, Meena and Sima?
(iii) Write the name of the friends in ascending order according to the distance covered by them.
(iv) Who is the winner of the competition?
(v) What is the difference between the distances covered by the friends who stood first and fifth in the mentioned competition?

Chapter 2: Linear Equations in One Variable

3. Read the sentence carefully and answer the questions given below :

The perimeter of a rectangular park is 247 m and it's length and breadth are $(5x + 6)$ and $(2x + 66)$ cm. respectively.



(i) Write the algebraic expressions which represent the perimeter and area of the given rectangular park.
(ii) Write the linear equation which helps us to find the value of x.
(iii) Find the value of x.
(iv) Find the length, breadth and area of the park.
(v) Find the cost of fencing the park, if the rate of fencing is Rs 19/m.

4. Read the passage carefully and answer the questions given below :

Radhika takes some flowers in a basket and visits five temples one-by-one. At each temple, she offers one half of the flowers from the basket. If she is left with 3 flowers at the end.
Let, the number of flowers she had in the beginning be 't'.

(i) Write the algebraic expression that shows the number of flowers left in the basket at the end of visiting all the five temples.
(ii) Write the equation and find the value of t.
(iii) How many flowers she had offered in the fourth and fifth temple individually?
(iv) How many flowers she had offered in total in first, second and third temple?
(v) If she had 160 flowers in the beginning, then find the number of flowers she will have left in the basket at the end of visiting all the five temples.