# Kendriya Vidyalaya No. 2, Port Blair

## **Holiday Homework - SUMMER VACATION**

## <u>CLASS X</u>

1. Solve all the examples from Chapter 1. Real Numbers, 2. Polynomials, 3. Pair of linear equations in Two variables.

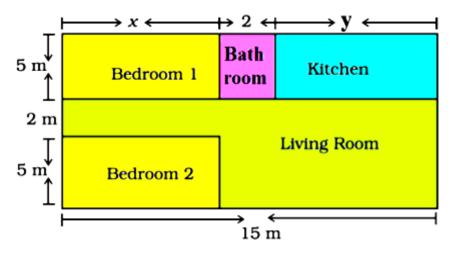
2. Prepare a table showing the conditions of consistency and inconsistency of pair of linear equations in two variables on Coloured A4 size sheet.

3. Write a detailed **report** on **"Mathematics in daily life**" with special reference to topics included in class X maths syllabus .

### CASE BASED QUESTIONS

### 1. Layout

Amit is planning to buy a house and the layout is given below. The design and the measurement has been made such that areas of two bedrooms and kitchen together is 95 sq.m.



Based on the above information, answer the following questions:

- 1. Form the pair of linear equations in two variables from this situation.
- 2. Find the length of the outer boundary of the layout.
- 3. Find the area of each bedroom and kitchen in the layout.
- 4. Find the area of living room in the layout.
- 5. Find the cost of laying tiles in kitchen at the rate of Rs. 50 per sq.m

#### 2. Stationery

Two teachers A and B went to a 'Sale' to purchase geometry box and notebooks for the prize distribution in Mathematics Quiz which will be organized next week in the school. The number of geometry box is one less than the number of notebooks purchased. Also, the three times number of geometry box is 12 less than two times the number of notebooks purchased".



#### Based on the above situation, answer the following questions:

(i) Form the pair of linear equations in two variables from this situation.

(ii) Draw the graphs of the above equations.

(iii) How many geometry boxes and notebooks teachers bought for the school?

(iv) Determine the coordinates of the vertices of the triangle formed by these lines and the y-axis.

(v) Determine the coordinates of the vertices of the triangle formed by these lines and the x-axis.