KUNDAN VIDYA MANDIR

CREATIVE ASSIGNMENT
CLASS- X
MATHS
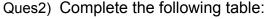
SET -2

INSTRUCTIONS:
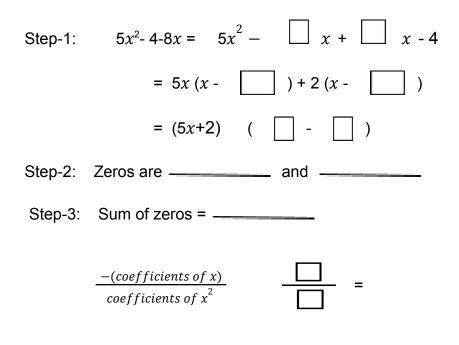
1) Do your work on sheets. Write questions with black pen and solutions with blue pen
2) Do your work neatly.
3) You can use different coloured pen/pencil colours to make your work more creative (in case any question requires)

Ques1) Radha tells her friend that her age in years is equal to the sum of the squares of the zeros of polynomial $x^2+8x+24$. Further Radha asserts that after two years her age in years will be product of the zeros of polynomial $x^2+14x+20$.

i) Find the age of Radha according to her first statement.
ii) Find the age of Radha after two years according to her 2nd statement.
iii) Conclude whether Radha is speaking truth or telling a lie.

Ques2) Complete the following table:

Find the zeros of polynomial $5x^2$ - 4- $8x$ and verify the relationship between zeros and coefficients.

Step-1: $5x^2$- 4-8x = $5x^2 -$ ☐ x + ☐ x - 4

= 5x (x - ☐) + 2 (x - ☐)

= (5x+2) (☐ - ☐)

Step-2: Zeros are ─────── and ───────

Step-3: Sum of zeros = ───────

$$\frac{-(coefficients\ of\ x)}{coefficients\ of\ x^2} \qquad \frac{☐}{☐} \ =$$

Step-4: Product of zeros =

$$\frac{☐}{☐}$$

$$\frac{constant\ term}{coefficients\ of\ x^2} =$$

Read the following information and answer Ques3 and Ques4

Ques3) The following frequency distribution shows the number of plants planted in 20 houses of a locality in Karnal.

No. of Plants	0-2	3-5	6-8	9-11	12-14	15-17	18-20
No. of houses	1	2	1	5	x	2	3

After noting down the data, its mean was calculated and it found to be 11.65, but due to some mistake data got erased and marked as 'x' in the frequency distribution table.

On the basis of above information answer the following questions

i) If the mean of above information is 11.65, what is the missing frequency?

Ques 4) Find the median of the above data.

ii) Find the mode of above data.

Ques5) Draw the mind map of chapter Statistics. (you can add your own imagination/creativity to make it more attractive)