

SAINIK SCHOOL LGOPALGANJ
CLASS – XI
SUB: MATHEMATICS (PROJECT)

1. Prepare a chart of Different sets of Household Items having same character in Tabular/Roster Form and Set Builder form.
2. Prepare sets of commodities at home starting with same alphabet of English like and write in roster and set builder form.
3. Prepare a set of commodities at home which are mixed with each other in cooking.
3. Classify the commodities at home in different well defined collections of objects.
4. Define five Relations between commodities at home and Write the relations in each case in Roster form. e.g.

$R = \{(a, b) : a \text{ is a product of } b, \text{ like butter is product of milk}\}$

Or

$R' = \{(x, y) : x \text{ can be mixed with } y \text{ in making a food or drink, like Tea leaf can be mixed with milk}\}$

Or

Relation of being in same geometrical shape between objects at home

5. Write in brief about Georg Cantor and John Venn.
6. Draw the graphs of sin, cosine, tan, sec, cosec and cot functions.