

**CLASS IX (2019-20)**  
**Holidays' Homework**  
**Mathematics**

**Note: Revise all the syllabus done in class so far.**

**TASK 1:**

Complete all the assignments on EDUCOSOFT for the chapters done so far.

Ch 1: Number System

Ch 3: Co-ordinate Geometry

Ch 2: Polynomials

Ch 4: Linear equations in two variables

**TASK 2:** Tickle your brain, surf the net and do the following creatively:

Try Maths Craft: 1) Make a beautiful paper snowflake and explore the mathematical concepts in it. (Roll nos 1 - 25 )

2) Make a beautiful fractal card and explore the mathematical concepts in it. (Roll nos 25 onwards)

You can refer the following link:

<http://mathematicsprojects.blogspot.com/?m=1>

**TASK 3:**

**DRIP RATE:**

Nurses need to calculate the drip rate,  $D$ , in drops per minute for infusions.

They use the formula  $D = \frac{d \times v}{60 n}$  where

$d$  is the drop factor measured in drops per millilitre(ml)

$v$  is the volume in ml of the infusion

$n$  is the number of hours the infusion is required to run.

**Question 1 :** A nurse wants to double the time an infusion runs for.

Describe precisely how  $D$  changes if  $n$  is doubled but  $d$  and  $v$  do not change.

**Question 2 :** Nurses also need to calculate the volume of the infusion,  $v$ , from the drip rate,  $D$ .

An infusion with a drip rate of 50 drops per minute has to be given to a patient for 3 hours. For this infusion the drop factor is 25 drops per millilitre.

What is the volume in ml of the infusion?