

S.D. Public School, Pitampura
Holidays Homework (2022-23)
Class – IX
MATHEMATICS

A) Art Integration

Make a collage of pictures of objects or places where tessellation pattern can be seen.

On an A4 sheet , Write a short note on the mathematical concepts behind tessellations.

B) Complete the Educosoft assessments of the chapters done so far.

C) Assignment(To be done on A4 sheets)

1) Express $1.8181\dots$ in the form p/q where p and q are integers and $q \neq 0$

2) Find the value of $\sqrt{(3)^{-2}}$.

3) Evaluate : $(27)^{\frac{1}{3}} \cdot (27)^{-\frac{1}{3}} \left[27^{\frac{1}{3}} - 27^{\frac{2}{3}} \right]$.

4) Plot the points $A(1, 4)$, $B(-2, 1)$ and $C(4, 1)$. Name the figure so obtained on joining them in order and also, find its area.

5) Find 'a', if linear equation $3x - ay = 6$ has one solution as $(4, 3)$.

6) Find the coordinates of the point :

(i) Which lies on both axes (ii) Whose abscissa is 2 and which lies on the x –axis

7) Rationalize and solve:

(i) $1/(\sqrt{3}-1)$

(ii) $6/(3\sqrt{2}-2\sqrt{3})$

(iii) $1/(\sqrt{6}+\sqrt{5})$