MODERN PUBLIC SCHOOL SEC. 37, Fbd. (HR)
Session — 2018-19.

Topic HOLYDAYS: HOMEWORK/CLASS: IX (Maths) Date

A: Solve the following Problems:

(1) find the value of $[(256)^{\frac{1}{2}}]^{\frac{1}{2}}$

(2) Draw the graph of $x+y=4$

(3) Express $2x=-5y$ in the form of $ax+by+c=0$ and indicate the values of a, b and c.

(4) find the value of P, if $f(x)=2x^4+px^3+4x^2+2x+1$ is exactly divisible by $(x-\frac{1}{2})$.

(5) factorise: x^3+x^2-4x-4.

(6) If $a+b+c=10+2=12$, $a^2+b^2+c^2=90$, find the value of $a^3+b^3+c^3-3abc$.

(7) If, $x=\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$ and $y=\frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$, find the value of $(x+y)^2$.

(8) Construct a triangle ABC having $\angle C=120$, $\angle B=30$ and $BC=6$ cm.

(9) what will be the mirror image of $(2,-4)$ in y-axis?

(10) What is the lateral surface area of a cuboid with dimensions l, b and h?

(11) factorise: $2x^2+\frac{y^2}{49}+3z^2-\frac{2\sqrt{2}}{7}xy-\frac{2\sqrt{3}}{7}yz+2\sqrt{6}zx$.

(12) Examine whether $\sqrt{2}$ is rational or irrational number?

(13) 1500 families with 2 children were selected randomly and the following data were recorded:

Number of girls in a family	2	1	0
Number of families	475	814	211

compute the Probability of a family, chosen at random, having (i) 1 girls (ii) 2 girls (iii) No girl.

(14) Solve for x: $\frac{3x-7}{5}-\frac{x+1}{6}=\frac{2x+2}{12}-1$

(15) Draw the graph of: $^{\circ}C=\frac{5^{\circ}F-169}{9}$.

Topic Date

B. Revision Work in rough Note book for C.T.

U-1: Rational and Irrational number, Representing real numbers on number line, Rationalise the denominator of an Irrational number, Law of-eponents.

U-2: finding the zeroes of Polynomials, Application of remainder theorem as well as factor theorem factorisation of Polynomials, Application of algebraic identities.

U-3: Location of points on the Cartesian plane

U-4: Solutions of linear equation in two variables, Representing the linear equation in two variables on graph paper.

C Write Algebraic Identities and formulas of Surface area and volumes on a chart Paper.

Note H.H.W. will be Checked only on 2nd, 3rd and 4th July/2018.

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