## INTERNATIONAL INDIAN SCHOOL <br> BURAIDAH

Worksheet For The Academic Year 2023-24

## CLASS: IX SUBJECT: Mathematics DATE: 29/10/2023

LESSON-5 Introduction to Euclid's Geometry

1) State any two Euclid's Axioms.
2) Solve $x-5=20$ using Euclid's axiom.
3) Solve $x+4=10$ using Euclid's axiom.
4) If $\llcorner 1=\llcorner 3,\llcorner 2=\llcorner 4$ and $\llcorner 3=\llcorner 4$, write the relation of $\llcorner 1$ and $\llcorner 2$ using Euclid's Axiom.
5) Prove that every line segment has one and only one midpoint.
6) How many lines can pass through two distinct points.
7) What are parallel lines?
8) If a point C be the midpoint of line segment AB , then write the relation among $A C, B C$ and $A B$.
9) If a point $C$ lies between $A$ and $B$ such that $A C=B C$, prove that $A C=\frac{1}{2} A B$.
10) If $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$ are points in an order on a line and $\mathrm{AC}=\mathrm{BD}$ then prove that $\mathrm{AB}=\mathrm{CD}$.
11) If $C$ is the midpoint of $A B$ and $D$ is the midpoint of $X Y$ and $A C=X D$,

Using Euclid's Axiom show that $\mathrm{AB}=\mathrm{XY}$.
12) In the figure, we have $\llcorner 1=\llcorner 3$ and $\llcorner 2=\llcorner 4$, show that $L A=\llcorner C$.
$(\llcorner\mathrm{BAC}=1,\llcorner\mathrm{BCA}=3,\llcorner\mathrm{DAC}=2,\llcorner\mathrm{DCA}=4)$

13) State Euclid's fifth Postulate. What is the postulate saying about?
14) State any two Euclid's Postulates.
15) What is the difference between a Postulate and a theorem.

