

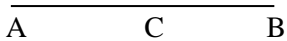
**Delhi Public School, Jammu**  
**Session- (2019-20)**  
**ASSIGNMENT -III**

**Subject: Mathematics**

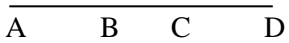
**Topics: Euclid Geometry**

Page | 1

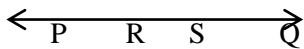
1. Prove that two distinct lines can not have more than one point in common.
2. Define 5<sup>th</sup> postulate with figure.
3. Solve the equation  $a-15 = 25$  and state which axiom do you use here.
4. If a point C lies between two points A and B such that  $AC=BC$ , then prove that  $AC=AB/2$ , explain by drawing the figure.
5. In the given figure If C is the mid-point of line segment AB, and then prove that every line segment has one and only one mid-point.



6. Does Euclid's fifth postulate imply the existence of parallel line? Explain.
7. If  $x + y = 10$  and  $y = z$ , then show that  $x + z = 10$ .
8. In a given figure, if  $AB=CD$ , then prove that  $AC=BD$ .



9. In the figure given below, if  $PS=RQ$ , then prove that  $PR = SQ$ .



10. In a figure given below, if  $QX = \frac{1}{2} XZ$  and  $QX = PX$ , then show that  $XY = XZ$ .

