

**CLASS IX – MATHEMATICS – CHAPTER 05
INTRODUCTION TO EUCLID’S GEOMETRY**

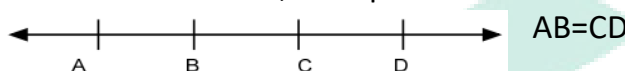
Name:

Date:

- 01.** The edges of a plane surface are.
(a). Line (b). points (c). Angles (d). planes.
- 02.** Given four points such that No three of them are collinear, then there exists.
(a). 2 lines (b). 4 lines (c). 6 lines (d). 5 lines
- 03.** One and only one line passes through. – Distinct points.
(a). one (b). two (c). Three (d). four.
- 04.** If equals are added to equals. The wholes are –
(a). equal (b). not equal (c). Doubled (d). none of these.

Q01. If A, B and C are three points on a line and B is between A and C, then prove that. $AC - BC = AB$

Q02. In given fig $AC = BD$, then prove that



Q03. In given fig $AB = CD$ prove that $AC=BD$

Q04. How would you rewrite Euclid’s fifth postulate.

Q05. If a point C lies between two points A and B such that $AC=BC$, then prove that $AC = \frac{1}{2} AB$. Explain by drawing the figure.

Q06. Prove that An equilateral triangle can be constructed on any given line segment.

Q07. If $AB= PQ$ and $PQ =XY$ then prove that $AB = XY$. Explain by drawing the fig.

Q08. Give a definition for each of the following are there other terms which need to be defined first? What are they, and how might you define them?

- | | |
|---------------------|--------------------------|
| (a). parallel lines | (b). perpendicular lines |
| (c). line segment | (d). radius of a circle |
| (e). square | |

Q09. Which of the following statements are true and which are false Explain.

- (a). Only one line pass. Through a single point
- (b). There are an infinite number of line which passes through two distinct points.
- (c). A terminated line can be produced indefinitely on both sides.
- (d). If two circles are equal, then their radii are equal.
- (e). In fig $AB=PQ$ and $PQ=XY$, then $AB=XY$.

