

**RS Aggarwal Solutions Class 9 Maths Chapter 6:** The solutions provided for Class 9 Maths Chapter 6 - Introduction to Euclid's Geometry by RS Aggarwal are really helpful for students preparing for their exams. They're made by subject experts who know the subject well. These solutions explain things step by step, making it easier for students to understand the concepts of geometry introduced by Euclid. Whether students are revising for exams or practicing problems, these solutions are great resources to help them improve their math skills and do well in their exams

## **RS Aggarwal Solutions Class 9 Maths Chapter 6 - Introduction to Euclid's Geometry PDF**

You can find the PDF link for RS Aggarwal Solutions Class 9 Maths Chapter 6 - Introduction to Euclid's Geometry below. This resource contains detailed solutions to all the exercises in the chapter, which will be beneficial for students to understand and practice the concepts effectively. By accessing this PDF, students can enhance their problem-solving skills and strengthen their understanding of Euclidean geometry, thereby improving their performance in exams and assessments.

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## **RS Aggarwal Solutions Class 9 Maths Chapter 6 - Introduction to Euclid's Geometry**

Below are the answers for RS Aggarwal Class 9 Maths Chapter 6 - Introduction to Euclid's Geometry. These solutions have been created by experts to help students understand the concepts better and solve problems easily. By using these solutions, students can improve their geometry skills and prepare well for their exams.

## **RS Aggarwal Solutions Class 9 Chapter 6 - Introduction To Euclid's Geometry Exercise 6.1**

### Question 1.

#### Solution:

An axiom is a basic fact that is taken for granted without proof.

Examples:

- i) Halves of equals are equal.
- ii) The whole is greater than each of its parts.

**Theorem:** A statement that requires proof is called theorem.

Examples:

- i) The sum of all the angles around a point is  $360^\circ$ .
- ii) The sum of all the angles of triangle is  $180^\circ$

### Question 2.

#### Solution:

**(i) Line segment :** A line segment is a part of line that is bounded by two distinct end-points. A line segment has a fixed length.



**(ii) Ray:** A line with a start point but no end point and without a definite length is a ray.



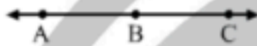
**(iii) Intersecting lines:** Two lines with a common point are called intersecting lines.



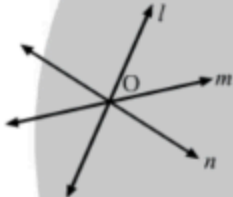
(iv) **Parallel lines:** Two lines in a plane without a common point are parallel lines.



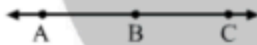
(v) **Half line:** A straight line extending from a point indefinitely in one direction only is a half line.



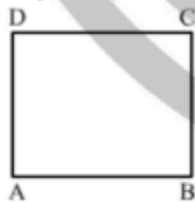
(vi) **Concurrent lines:** Three or more lines intersecting at the same point are said to be concurrent.



(vii) **Collinear points:** Three or more than three points are said to be collinear if there is a line, which contains all the points.



(viii) **Plane :** A plane is a surface such that every point of the line joining any two points on it, lies on it.



### Question 3.

#### Solution:

(i) Points are A, B, C, D, P and R.

(ii)  $\overline{EF}$ ,  $\overline{GH}$ ,  $\overline{FH}$ ,  $\overline{EG}$ ,  $\overline{MN}$

(iii)  $\overrightarrow{EP}$ ,  $\overrightarrow{GR}$ ,  $\overrightarrow{HS}$ ,  $\overrightarrow{FQ}$

(iv)  $\overleftrightarrow{AB}$ ,  $\overleftrightarrow{CD}$ ,  $\overleftrightarrow{PQ}$ ,  $\overleftrightarrow{RS}$

(v) Collinear points are M, E, G and B.

### Question 4.

#### Solution:

(i) Two pairs of intersecting lines and their point of intersection are

$\left\{ \overleftrightarrow{EF}, \overleftrightarrow{GH}, \text{point } R \right\}$ ,  $\left\{ \overleftrightarrow{AB}, \overleftrightarrow{CD}, \text{point } P \right\}$

(ii) Three concurrent lines are

$\left\{ \overleftrightarrow{AB}, \overleftrightarrow{EF}, \overleftrightarrow{GH}, \text{point } R \right\}$

(iii) Three rays are

$\left\{ \overrightarrow{RE}, \overrightarrow{RH}, \overrightarrow{RF} \right\}$

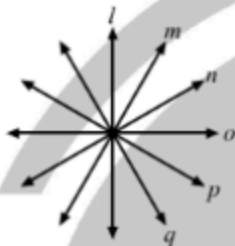
(iv) Two line segments are

$\left\{ \overline{RQ} \text{ and } \overline{RP} \right\}$

**Question 5.**

**Solution:**

(i) Infinite lines can be drawn through a given point.



(ii) Only one line can be drawn through two given points.



(iii) At most two lines can intersect at one point.



(iv) The line segments determined by three collinear points A, B and C are

$\overline{AB}$ ,  $\overline{BC}$  and  $\overline{AC}$ .



**Question 6.**

**Solution:**

- (i) False. A line segment has a definite length.
- (ii) False. A ray has one end-point.
- (iii) False. A line has no definite length.
- (iv) True
- (v) False.
- (vi) True
- (vii) True
- (viii) True
- (ix) True
- (x) True
- (xi) False. Two lines intersect at only one point.
- (xii) True