

**Class: 9**  
**Subject: Mathematics**  
**Topic: Introduction to Euclid's Geometry**  
**No. of Questions: 20**

Q1. Which are the two Greek words, the word 'geometry' has been derived from?

Sol. 'Geo' and 'metron'

Q2. What is the meaning of these two words?

Sol. 'Geo' means "the earth" 'metron' means 'measurement'

Q3. What does the word 'Geometry' mean?

Sol. 'Measurement of the earth'

Q4. Who were the first people to study geometry?

Sol. The ancient Egyptians and the Babylonians.

Q5. Who were the people who used the knowledge of geometry for calculating areas of fields and volume of grain store house?

Sol. The Egyptians

Q6. Who developed formulae for areas of rectilinear figure such as rectangles and triangles?

Sol. The Babylonians

Q7. To whom goes the credit for the systematic study of geometry?

Sol. The Greeks

Q8. Name the two most well-known Greek Mathematics?

Sol. Thales and Pythagoras

Q9. Who is known as the 'father of geometry'?

Sol. Euclid

Q10. What is the name of Euclid's most famous work?

Sol. Elements

Q11. Name two Indian mathematicians who contributed significantly in the field of geometry?

Sol. Brahmagupta, Bhaskara II, Aryabhata

Q12. What is the difference between axioms and postulates?

Sol. Axioms are the common notations (assumptions) used throughout mathematics and not specially linked to geometry. While a postulate can be specific on a particular field.

Q13. State Euclid's Postulate for a straight line.

Sol. A straight line may be drawn from any one point to any other point.

Q14. State Euclid's postulate for a straight circle.

Sol. A circle can be drawn with any radius and any centre.

Q15. What is the Euclid's postulate on right angles?

Sol. All right angles are equal to one another.

Q16. What is Euclid's fifth postulate?

Sol. If a straight line falling on two straight lines makes the interior angles on the same side of it taken together less than two right angles, if produced indefinitely, meet on that side on which the sum of angles is less than two right angles.

Q17. Who restated the fifth postulate of Euclid's?

Sol. John Playfair in 1729.

Q18. What is the name given to restated form of Euclid's fifth postulate?

Sol. Playfair's Axiom

Q19. Give the statement of restated form of Euclid's fifth postulate?

Sol. In a plane, given a line and a point not on it, at most one line parallel to the given line can be drawn through the point.

Q20. What is the difference between axiom and Theorems?

Sol. Axioms are the basic facts which are taken for granted without proof. They are obvious universal truth. Theorems are statement which is proved through logical reasoning based on previously proved result and some Axioms.