2. What is the least number of distinct points which determine a unique line?
3. In how many maximum numbers of points can two distinct lines intersect?
4. State playfair's Axiom.
5. What is the name of the work that contained Euclid's thirteen volumes?
6. How many lines can be drawn through a single point?
7. Can two distinct intersecting lines be parallel to the same line? Why?
8. Given two points L and M , how many line segments do they determine?
9. Name the line segments determined by three collinear points $x, y$ and $z$ ?

10 . What are the three basic concepts in geometry?

## 11. Fill in the blanks:

1.Things which are equal to the same things are $\qquad$ to one another. 32. The $\qquad$ is greater than the part.
3. Things which are double of the ____ are equal to one another.
4. Two distinct point in a plane determine a $\qquad$ line.
5. A line seperates a plane into parts namely the $\qquad$ and the $\qquad$ itself.

## Solution:

1. In spite of several attempts till today, this postulate could not be proved as a theorem. Moreover, these attempts have led to the creation of different other geometries known as non-Euclidean geometries.
2. Two
3. One
4. Two distinct intersecting lines cannot be parallel to the same line.
5. Elements
6. Infinite
7. No, Playfair's Axiom
8. One
9. XY, YZ, ZX
10. Point, line and plane
11. 12. Equal
1. Whole
2. Same thing 4. Unique 5. Three, two half planes, line
