

DEFINITIONS GIVEN BY EUCLID

1. **POINT:** a point is that which has no part.
2. **LINE:** A line is breadthless length.
3. **EXREMITIES OF A LINE:** The extremities of a line are points.
4. **STRAIGHT LINE:** A straight line is line which lies evenly with the points on itself.
5. **SURFACE:** A surface is that which has length and breadth only.
6. **EXTREMITIES OF A SURFACE:** the extremities of a surface are lines.
7. **PLANE SURFACE:** A plane surface is a surface which lies evenly with the straight lines on itself.
8. **PLANE ANGLE:** A plane angle is the inclination to one another of two lines in a plane which meet one another and do not lie in a straight line.
9. **RECTILINEAR:** When the lines containing the angle are straight, the angle is called rectilinear angle.
10. **PERPENDICULAR LINES:** When a straight line set up on a straight line makes the adjacent angles equal to one another, each of the equal angle is right, and the straight line standing on the other is called perpendicular to that on which it stands.
11. **OBTUSE ANGLE:** An obtuse angle is an angle greater than a right angle.
12. **ACUTE ANGLE:** An acute angle is an angle less than a right angle.
13. **BOUNDARY:** A boundary is that which is an extremity of anything.
14. **FIGURE:** A figure is that which is contained by any boundary or boundaries.
15. **CIRCLE:** A circle is a plane figure contained by one line such that all the straight lines falling upon it from one point among those lying within the figure are equal to one another. 16. And the point is called the centre of the circle.
17. **DIAMETER OF THE CIRCLE:** A diameter of the circle is any straight line drawn through the centre and terminated in both directions by the circumference of the circle, and such a straight line also bisects the circle.
18. **SEMICIRCLE:** A Semicircle is the figure contained by the diameter and the circumference cut off by it. And the centre of the semicircle is the same as that of the circle.
19. **RECTILINEAR FIGURES:** Rectilinear figures are those which are contained by straight lines, trilateral figures being those contained by three, quadrilateral those contained by four, an multilateral those contained by more than four straight lines.
20. Of trilateral figures, an equilateral triangle is what which has its three sides equal, an isosceles triangle that which has two of its sides alone equal, and a scalene triangle that which has its three sides unequal.