Euclid Geometry Formative assessment

1. Which of this statement are axioms, postulates, definition, Theorem?

a) If equals are added to equals, the wholes are equal

b) The edges of a surface are lines

c) All right angles are equal to one another

d) If first thing is greater than second and second is greater than third, then first is greater than third

e) The whole is greater than the part

f) Two distinct lines cannot have more than one point in common

g) For every line l and for every point P not lying on the line l, there exists a unique line m passing through P and Parallel to l

Solution

Axioms: (a), (d), (e), (g)

Postulates: (c)

Definition: (b)

Theorem: (f)

2. Define each of the following terms

a) Parallel lines

b) Angle

c) Line segment

d) Radius of a circle

e) Square

f) Quadrilateral

Solution

a) Two lines are parallel when they are not intersecting and are coplanar

b) Angle is the figure formed by two rays with common initial points

c) A line segments is a part of line with two end points.

d) The distance from the center of the circle to any point on the circle is called radius of the circle

e) A square is a quadrilateral of which all the four angles are rights angles and four sides are equal

f) A simple closed figure made up of four lines

3) **True or False statement**
a) In geometry, we take point, line and plane as undefined term
b) Two lines drawn in a plane always intersect at a point
c) Only one line can pass through points X and Y
d) If two circle are equal, there radii is also equal
e) Three points are concurrent if they have only one common point
f) The statements that are proved are called postulates
g) The whole is greater than the part is a postulate
h) If the area of square X equals to the area of rectangle Y and the area of rectangle Y is equal to area of circle Z then area of square X equals to area of circle Z

Solution

a) True
b) False, as parallel lines never intersect
c) True
d) True
e) True
f) False
g) False
h) True

Multiple choice Questions

4) Euclid belongs to
a) Greece
b) Italy
c) Germany

d) Egypt

Solution (a)

5. The total number of propositions in the elements is?
a) 20
b) 7
c) 13
d) 465

Solution (d)

6) Ram salary is equal to Mohan salary, Due to recession, the salaries of ram and Mohan are made half. The final salary of Ram will still be equal to Mohan. This is are per

a) Ist axiom
b) 7Th axiom
c) 6^{th} axiom
d) 2^{nd} axiom

Solution (b)

7) Which of these statements are false?
a) The number of dimensions in the solid is three
b) The number of dimensions in the surface is two
c) The number of dimensions of a point is 1
d) None of these

Solution ©

8) The number of line segments determined by the three non collinear points is

a) one
b) two
c) three
d) four

Solution ©

9) Boundaries of the solid are

a) lines
b) points
c) surface
d) curves

Solution ©

10) It is known that if p+q=11 then P+q+r=11+r. The Euclid axioms that illustrates this statement is

a) Ist axiom
b)3Th axiom
c) 4th axiom
d) 2nd axiom

Solution (d)

Match the column

Who gave the proof that circle can be bisected into two equal parts by its diameter	Brahagupta
Who derived the value for area of isosceles triangle	Aryabatta
Who derived the value for volume of pyramid	Bhaskara -II
Who discovered the formula for the finding the area of cyclic quadrilateral	Thales
	Pythagoras