1. Which term is taken as undefined in modern geometry?
   A. Triangle B. Circle
   C. Point D. Angle (C)

Explanation : The concept of a point is left undefined because any attempt to define it leads to further undefined terms.

2. What does Euclid's first postulate state?
   A. A line has no thickness
   B. A line segment can be extended
   C. A straight line may be drawn from any one point to any other point
   D. All angles are equal (C)

Explanation : The first postulate allows drawing a straight line between any two points.

3. How many dimensions does a surface have?
   A. Zero B. One
   C. Two D. Three (C)

Explanation : A surface has only length and breadth, which means it has two dimensions.

4. What is the fifth postulate of Euclid known for?
   A. Its simplicity B. Its clarity
   C. Its complexity D. Its proof (C)

Explanation : The fifth postulate is more complex compared to the others and received special attention.

5. Which axiom justifies the principle of superposition?
   A. The whole is greater than the part
   B. Things which coincide with one another are equal
   C. Things which are double of the same things are equal
   D. Things equal to the same thing are equal (B)

Explanation : If two things coincide, they are equal — this supports the idea of superposition.

6. What does Axiom 1 state?
   A. The whole is greater than the part
   B. All right angles are equal
   C. Things equal to the same thing are equal to one another
   D. A straight line can be extended (C)

Explanation : Axiom 1 states a basic equality rule involving comparison to a common third entity.

7. What shape is formed by joining two equal radii from a common center?
   A. Square B. Rectangle
   C. Equilateral triangle D. Circle (C)

Explanation : In the construction example, two circles intersect to form an equilateral triangle.

8. Which of the following is not an axiom but a postulate?
   A. If equals are added to equals, the wholes are equal
   B. A circle can be drawn with any center and radius
   C. The whole is greater than the part
   D. Things which coincide are equal (B)

Explanation : This is Euclid's third postulate and is specific to geometry.

9. What does Postulate 2 state?
   A. A line segment has one end
   B. A line can be folded
   C. A terminated line can be produced indefinitely
   D. A line is a circle (C)

Explanation : Postulate 2 allows us to extend a line segment in both directions endlessly.

10. Which example uses Euclid's Axiom 4 (coincidence implies equality)?
    A. Midpoint division
    B. AB + BC = AC when B lies between A and C
    C. Construction of a square
    D. Triangle angle sum (B)

Explanation : When AB and BC together form AC, and they coincide, they are equal as per Axiom 4.