**1. The sum of the interior angles of a polygon with ‘n’ sides is given by:**

A) (n−2)×180∘(n - 2) \times 180^\circ(n−2)×180∘  
B) (n+2)×180∘(n + 2) \times 180^\circ(n+2)×180∘  
C) 360∘360^\circ360∘  
D) (n−1)×180∘(n - 1) \times 180^\circ(n−1)×180∘  
**Answer:** A) (n−2)×180∘(n - 2) \times 180^\circ(n−2)×180∘

**2. The exterior angles of any polygon sum up to:**

A) 360∘360^\circ360∘  
B) 180∘180^\circ180∘  
C) 90∘90^\circ90∘  
D) 720∘720^\circ720∘  
**Answer:** A) 360∘360^\circ360∘

**3. In a right-angled triangle, the longest side is called:**

A) Base  
B) Hypotenuse  
C) Perpendicular  
D) Diagonal  
**Answer:** B) Hypotenuse

**4. The Pythagorean Theorem states that in a right-angled triangle:**

A) a2+b2=c2a^2 + b^2 = c^2a2+b2=c2  
B) a2−b2=c2a^2 - b^2 = c^2a2−b2=c2  
C) 2a+b=c2a + b = c2a+b=c  
D) a+b=ca + b = ca+b=c  
**Answer:** A) a2+b2=c2a^2 + b^2 = c^2a2+b2=c2

**5. The number of lines of symmetry in a regular hexagon is:**

A) 3  
B) 4  
C) 6  
D) 8  
**Answer:** C) 6

**6. The area of a circle is given by the formula:**

A) πr\pi rπr  
B) 2πr2\pi r2πr  
C) πr2\pi r^2πr2  
D) πd2\frac{\pi d}{2}2πd​  
**Answer:** C) πr2\pi r^2πr2

**7. If two triangles are similar, then their corresponding sides are:**

A) Equal  
B) Parallel  
C) In the same ratio  
D) Perpendicular  
**Answer:** C) In the same ratio

**8. A quadrilateral with opposite sides parallel and equal in length is called:**

A) Kite  
B) Parallelogram  
C) Trapezium  
D) Rhombus  
**Answer:** B) Parallelogram

**9. The diagonal of a square with side length ‘s’ is given by:**

A) sss  
B) 2s2s2s  
C) s2s\sqrt{2}s2​  
D) s2s^2s2  
**Answer:** C) s2s\sqrt{2}s2​

**10. The sum of opposite angles in a cyclic quadrilateral is always:**

A) 180∘180^\circ180∘  
B) 90∘90^\circ90∘  
C) 360∘360^\circ360∘  
D) 270∘270^\circ270∘  
**Answer:** A) 180∘180^\circ180∘

**11. A tangent to a circle is always \_\_\_\_\_\_ to the radius at the point of contact.**

A) Parallel  
B) Perpendicular  
C) Equal  
D) Bisecting  
**Answer:** B) Perpendicular

**12. The centroid of a triangle divides each median in the ratio:**

A) 1:1  
B) 2:1  
C) 3:1  
D) 1:2  
**Answer:** B) 2:1

**13. If the base and height of a triangle are doubled, then its area becomes:**

A) Same  
B) Doubled  
C) Four times  
D) Half  
**Answer:** C) Four times

**14. The distance formula between two points A(x1,y1)A(x\_1, y\_1)A(x1​,y1​) and B(x2,y2)B(x\_2, y\_2)B(x2​,y2​) is:**

A) (x1−x2)2+(y1−y2)2\sqrt{(x\_1 - x\_2)^2 + (y\_1 - y\_2)^2}(x1​−x2​)2+(y1​−y2​)2​  
B) (x1+x2)2+(y1+y2)2(x\_1 + x\_2)^2 + (y\_1 + y\_2)^2(x1​+x2​)2+(y1​+y2​)2  
C) x1+x22,y1+y22\frac{x\_1 + x\_2}{2}, \frac{y\_1 + y\_2}{2}2x1​+x2​​,2y1​+y2​​  
D) (x1−x2)2+(y1−y2)2(x\_1 - x\_2)^2 + (y\_1 - y\_2)^2(x1​−x2​)2+(y1​−y2​)2  
**Answer:** A) (x1−x2)2+(y1−y2)2\sqrt{(x\_1 - x\_2)^2 + (y\_1 - y\_2)^2}(x1​−x2​)2+(y1​−y2​)2​

**15. The volume of a cylinder with radius ‘r’ and height ‘h’ is:**

A) 2πrh2\pi r h2πrh  
B) πr2h\pi r^2 hπr2h  
C) 43πr3\frac{4}{3} \pi r^334​πr3  
D) πrh2\pi r h^2πrh2  
**Answer:** B) πr2h\pi r^2 hπr2h