

Geometry Challenges for Young Minds

Geometry · Answer Key · 13 Questions

1. Which type of quadrilateral always has four equal sides but does not necessarily have four right angles?

- A) Square
- B) Rectangle
- C) Rhombus**
- D) Trapezium

2. How many faces does a regular octahedron have?

- A) 4
- B) 6
- C) 8**
- D) 12

3. What is the term for a line segment that connects two non-adjacent vertices of a polygon?

- A) Side
- B) Edge
- C) Diagonal**
- D) Radius

4. What is the specific name for a polygon where all sides are equal in length and all interior angles are equal in measure?

- A) Irregular polygon
- B) Convex polygon
- C) Concave polygon
- D) Regular polygon**

5. Which geometric solid is defined as having two identical and parallel polygonal bases, with rectangular or parallelogram faces connecting them?

- A) Pyramid
- B) Cone
- C) Prism**
- D) Cylinder

6. What is the sum of the interior angles of any quadrilateral?

- A) 90 degrees
- B) 180 degrees
- C) 360 degrees**
- D) 540 degrees

7. If two angles add up to exactly 90 degrees, what are they called?

- A) Supplementary angles
- B) Reflex angles
- C) Complementary angles**
- D) Obtuse angles

8. What is the common name for the distance around the outer boundary of a circle?

- A) Diameter
- B) Radius
- C) Circumference**
- D) Area

9. How many lines of symmetry does a regular pentagon possess?

- A) 1
- B) 3
- C) 4
- D) 5**

10. Which geometric transformation involves moving a shape without rotating, reflecting, or resizing it?

- A) Rotation
- B) Reflection
- C) Translation**
- D) Dilation

11. A straight angle measures exactly how many degrees?

- A) 90 degrees
- B) 180 degrees**
- C) 270 degrees
- D) 360 degrees

12. What is the maximum number of edges that can meet at a single vertex in a cube?

- A) 1
- B) 2
- C) 3**
- D) 4

13. What is the specific name for the region of a circle bounded by two radii and the arc between them?

- A) Segment
- B) Chord
- C) Sector**
- D) Tangent