

Fundamental Geometry Facts

Geometry · Answer Key · 15 Questions

1. What is the sum of the interior angles of any triangle?

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

2. Which geometric shape has exactly four equal sides and four right angles?

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

3. What is a straight line that passes through the center of a circle and touches two points on its circumference called?

- A) Radius
- B) Chord
- C) Tangent
- D) Diameter**

4. Lines that are always the same distance apart and never intersect are known as what type of lines?

- A) Perpendicular lines
- B) Intersecting lines
- C) Parallel lines**
- D) Skew lines

5. An angle that measures exactly 90 degrees is called a(n) _____ angle.

- A) Acute
- B) Obtuse
- C) Right**
- D) Straight

6. How many sides does a pentagon have?

- A) Three
- B) Four
- C) Five**
- D) Six

7. Which of these is a three-dimensional shape with six identical square faces?

- A) Pyramid
- B) Cylinder
- C) Cube**
- D) Sphere

8. The distance around the outside of a circle is called its what?

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

9. What geometric tool is used to measure angles?

- A) Ruler
- B) Compass
- C) Protractor**
- D) Set square

10. A triangle with all three sides of different lengths is called a(n) _____ triangle.

- A) Isosceles
- B) Equilateral
- C) Scalene**
- D) Right

11. What is the common point where two rays or line segments meet to form an angle called?

- A) Side
- B) Vertex**
- C) Edge
- D) Plane

12. Which term describes an angle that is greater than 90 degrees but less than 180 degrees?

- A) Acute angle
- B) Reflex angle
- C) Straight angle
- D) Obtuse angle**

13. The shortest distance between two points is always what kind of line?

- A) Curved line
- B) Dotted line
- C) Zigzag line

D) Straight line

14. What is the formula for the area of a rectangle?

- A) Length + Width
- B) $2 * (\text{Length} + \text{Width})$

C) Length * Width

- D) Length / Width

15. What is the name for a polygon with eight sides?

- A) Hexagon
- B) Heptagon

C) Octagon

- D) Nonagon