

Geometry: Parallel Lines and Quadrilaterals

Mathematics · Answer Key · 15 Questions

1. Which term describes alternate interior angles?

- A) Same-side interior
- B) Corresponding
- C) Alternate interior**
- D) Vertical

2. What is the sum of complementary angles?

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

3. What is the sum of supplementary angles?

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

4. How is the slope of a non-vertical line defined?

- A) Change in x / Change in y
- B) Change in y / Change in x**
- C) Product of intercepts
- D) Sum of points

5. In the equation $y = -2x + 7$, what is the y-intercept?

- A) -2
- B) x
- C) 7**
- D) -2x

6. What is the slope of the line passing through (-2, 8) and (2, -4)?

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

7. What do you find when setting $y = 0$ in a linear equation?

- A) y-intercept
- B) Slope
- C) Range
- D) x-intercept**

8. What is the condition for two distinct non-vertical lines to be parallel?

- A) Equal slopes**
- B) Opposite y-intercepts
- C) Reciprocal slopes
- D) Product of -1

9. What is the condition for two lines to be perpendicular?

- A) Equal slopes
- B) Product of slopes is -1**
- C) Equal y-intercepts
- D) Equal x-intercepts

10. What is a quadrilateral with two pairs of opposite sides parallel called?

- A) Kite
- B) Trapezoid
- C) Parallelogram**
- D) Pentagon

11. What is the sum of the interior angles of a quadrilateral?

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

12. Which property of the diagonals of a parallelogram is always true?

- A) They are perpendicular
- B) They have equal lengths
- C) They bisect each other**
- D) They form four right angles

13. What is a rhombus with congruent diagonals classified as?

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

14. What is the measure of each angle in a rectangle?

- A) 45°
- B) 60°
- C) 90°**
- D) 180°

15. What is the slope of a line parallel to a line with slope $-3/5$?

- A) $5/3$
- B) $-5/3$
- C) $3/5$
- D) $-3/5$**