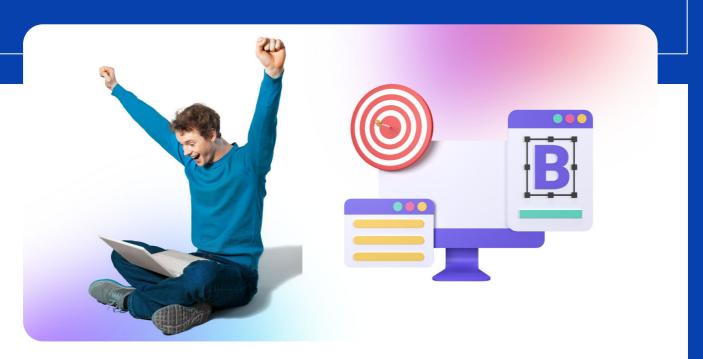


# PARALLELOGRAM

A parallelogram, a fundamental 2D geometric shape, boasts two sets of parallel sides with equal lengths. Within this class of quadrilaterals, adjacent angles consistently sum up to 180 degrees, imparting a significant attribute to its structure. In geometry, there are a myriad of 2-D shapes and figures, ranging from squares and rectangles to circles and rhombuses, each uniquely defined by their distinct characteristics. Hence, for a complete understanding of the parallelogram, it is needed to explore its parallelogram definition and parallelogram meaning, characteristics, significances, and properties.







### Q1: What type of parallelogram has equal sides and right angles?

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

### Q2: How many diagonals does a parallelogram have?

- A: 0
- B: 1
- C: 2
- D: 4

### Q3: What is the formula to calculate the area of a parallelogram?

A: A = base × height B: A = (base + height) / 2 C: A = length × width D: A = 2 × (base + height)

# Q4: If the base of a parallelogram is 6 meters and the height is 4 meters, what is its area?

A: 24 square meters B: 15 square meters C: 12 square meters D: 10 square meters

### Q5: What is the formula for the perimeter of a parallelogram?

A:  $P = 4 \times base$ B:  $P = 2 \times (length + width)$ C:  $P = base \times height$ D:  $P = 2 \times (base + side)$ 



### Q6: If one side of a parallelogram is 8 meters and the base is 5 meters, what is its perimeter?

A: 18 meters

- B: 26 meters
- C: 32 meters
- D: 40 meters

### Q7: How many pairs of parallel sides does a parallelogram have?

A: 0

B: 1

C: 2

D: 4

## Q8: Which of the following statements is true regarding the diagonals of a parallelogram?

- A: The diagonals are equal in length.
- B: The diagonals are always perpendicular.
- C: The diagonals bisect each other.
- D: The diagonals form a right angle.

# Q9: If the height of a parallelogram is 10 inches and the base is 6 inches, what is its area?

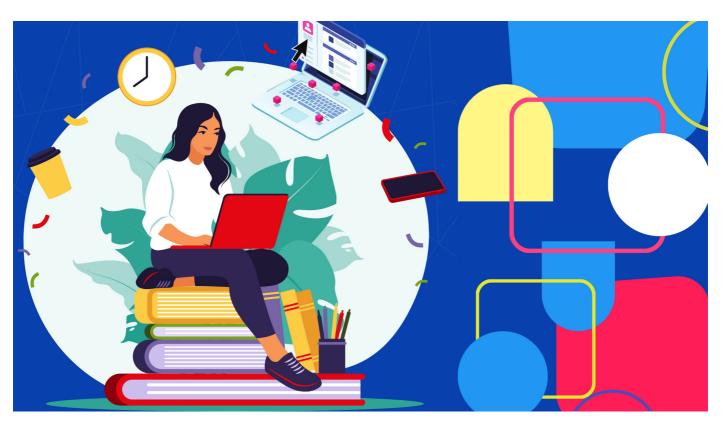
A: 60 square inches

- B: 30 square inches
- C: 36 square inches
- D: 15 square inches

### Q10: How are opposite angles in a parallelogram related?

- A: They are congruent.
- B: They are supplementary.
- C: They are complementary.
- D: They are equal to 90 degrees.





#### Answers

- Q1: C Square
- **Q2:** C 2
- Q3: A A = base × height
- Q4: A 24 square meters
- **Q5:** D P = 2 × (base + side)
- Q6: B 26 meters
- **Q7:** C 2
- **Q8:** C The diagonals bisect each other.
- Q9: A 60 square inches
- Q10: A They are congruent.