

AREA OF REGULAR POLYGON FORMULA

Imagine you're an architect designing a new skyscraper, a cartographer mapping uncharted territories, or a video game designer creating virtual landscapes. What do all these professions have in common? They rely heavily on polygons. What's a polygon? Is there a regular polygon? Find out all this and the latest tricks to improve geometry right here!







Q1: Which of the following polygons is considered a regular polygon?

A: Square B: Rectangle C: Trapezoid D: Irregular pentagon

Q2: What is the formula for finding the area of a regular polygon?

A: A = length × width B: A = $1/2 \times base \times height$ C: A = $(1/2) \times perimeter \times apothem$ D: A = $\pi \times radius^2$

Q3: What is the area formula for a regular hexagon?

A: A = $6s^2$ B: A = $(3\sqrt{3}/2) \times s^2$ C: A = $(1/2) \times base \times height$ D: A = $(1/2) \times perimeter \times apothem$

Q4: What is a polygon?

A: A three-dimensional shapeB: A closed, flat shape with straight sidesC: A shape with only curved sidesD: A shape with no sides

Q5: How many sides does a hexagon have?

A: Four

B: Five

C: Six

D: Seven



Q6: In a regular polygon, which of the following properties is true?

- A: All sides are of different lengths.
- B: All angles are of different measures.
- C: All sides are of equal length.
- D: All angles are of different measures.

Q7: What is the sum of the interior angles of a triangle?

- A: 90 degrees
- B: 120 degrees
- C: 180 degrees
- D: 360 degrees

Q8: Which polygon has eight sides?

- A: Octagon
- B: Hexagon
- C: Decagon
- D: Heptagon

Q9: If all sides of a polygon are equal but not all angles are equal, what type of polygon is it?

- A: Regular polygon
- B: Equilateral polygon
- C: Equiangular polygon
- D: Irregular polygon

Q10: What is the name of a polygon with five sides?

- A: Quintagon
- B: Pentagon
- C: Hexagon
- D: Septagon





Answers

- Q1: A Square
- Q2: C A = (1/2) × perimeter × apothem
- **Q3:** B A = (3√3/2) × s²
- Q4: B A closed, flat shape with straight sides
- **Q5:** C Six
- Q6: C All sides are of equal length.
- Q7: C 180 degrees
- Q8: A Octagon
- Q9: D Irregular polygon
- Q10: D Septagon