

Subject: Mathematics

Class: 6

Topic: Triangles and Quadrilaterals

Levels: Basic, Intermediate, Advanced

Level: Basic

1. A triangle has _____ sides and _____ vertices.
2. A closed figure with four sides is called a _____ (e.g., Square).
3. Identify the shape: Rahul draws a figure with 3 sides. It is a _____.
4. A triangle where all three sides are equal is an _____ triangle.
5. How many diagonals does a simple triangle have? _____
6. In a quadrilateral ABCD, the sum of all internal angles is _____ degrees.
7. A triangle with one angle equal to 90° is called a _____-angled triangle.
8. True or False: A square is a special type of quadrilateral. []
9. Draw a simple triangle and label its vertices as P, Q, and R.
10. A quadrilateral has _____ pairs of opposite sides.

Subject: Mathematics

Class: 6

Topic: Triangles and Quadrilaterals

Levels: Basic, Intermediate, Advanced

Level: Intermediate

1. If the three angles of a triangle are 60° , 60° , and 60° , it is _____.
2. A quadrilateral with only one pair of parallel sides is called a _____.
3. If Arjun buys a triangular scale for 45 and a square protractor for 55, total cost is _____.
4. In triangle ABC, if $A = 50$ and $B = 70$, then $C =$ _____ degrees.
5. A rhombus is a quadrilateral where all _____ are equal in length.
6. Calculate the perimeter of a triangle with sides 5cm, 7cm, and 8cm: _____ cm.
7. Can a triangle have two right angles? (Yes / No): _____
8. A polygon with 4 sides where opposite sides are equal and parallel is a _____.
9. If a wire of 40cm is bent into a square, each side will be _____ cm.
10. Identify the symbol: In geometry, (θ) is often used to represent an _____.

Subject: Mathematics

Class: 6

Topic: Triangles and Quadrilaterals

Levels: Basic, Intermediate, Advanced

Level: Advanced

1. The sum of any two sides of a triangle is always _____ (greater/less) than the third side.
2. In a rectangle PQRS, if length is 10cm and breadth is 6cm, find the perimeter: _____ cm.
3. If the angles of a quadrilateral are in ratio 1:2:3:4, find the smallest angle: _____°.
4. An isosceles triangle has two sides of 5cm and 5cm. If the perimeter is 16cm, the third side is _____ cm.
5. A kite is a quadrilateral with two pairs of equal _____ sides.
6. Prove: If the sum of two angles is 90, they are called complementary. Is this possible in a triangle? []
7. A parallelogram with all angles as 90° and all sides equal is a _____.
8. If the area of a square plot in Bengaluru is 100 sq.m, the length of its side is _____ m.
9. In a circle, if we draw three points on the boundary and join them, we get a _____.
10. Challenge: Using 3.14, if a circular wire is reshaped into a quadrilateral, does the area change? []