

Mathematics
Class – VII
Assignment - (Triangles and Their Properties)

1. If D is the mid-point of the side BC in triangle ABC where $AB = AC$, then angle ADC is
 - a) 120°
 - b) 60°
 - c) 45°
 - d) 90°
2. Identify the type of triangle:
 - i. A triangle with all sides equal.
 - ii. A triangle with two sides equal.
 - iii. A triangle with all sides of different lengths.
 - iv. A triangle with one angle greater than 90° .
 - v. A triangle with one angle equal to 90° .
3. Fill in the blanks:
 - i. The sum of the interior angles of a triangle is _____.
 - ii. In an equilateral triangle, each angle measures _____ degrees.
 - iii. The longest side of a right-angled triangle is called the _____.
 - iv. In an isosceles triangle, the angles opposite the equal sides are _____.
4. **Assertion (A)** : in a triangle, median divides the side into equal parts.
Reason (R) : In equilateral triangle median divides the triangle into two equal parts.
5. A triangle has angles measuring 50° , 60° , and x° . Find the value of x.
6. The lengths of two sides of a triangle are 7 cm and 10 cm. What could be the range of possible lengths for the third side?
7. In a right-angled triangle, one of the angles is 35° . Find the other two angles.
8. What is the sum of the exterior angles of any triangle?
9. In an isosceles triangle, if one angle is 40° , find the measure of the other two angles.
10. If two angles of a triangle are 50° and 60° , what is the third angle?