Isosceles Triangle

Review

- An isosceles triangle is a triangle in which two sides have the same length.
- An equilateral triangle is a triangle in which all the three sides are equal in length.
- All equilateral triangles are isosceles triangles and all isosceles triangles are not equilateral triangles.

Important Theorems

- If two sides of a triangle are equal, the angles opposite to them are also equal.
- If two angles of a triangle are equal, the sides opposite to them are also equal.
- The bisector of the angle at the vertex of an isosceles triangle bisects the base at right angles.
- If equal sides of an isosceles triangle are produced, the exterior angles so formed are equal.
- The perpendicular bisector of the base of an isosceles triangle passes through the vertex of the triangle.
- The line, joining the mid-point of the base of an isosceles triangle and the opposite vertex is perpendicular to the base and bisects the angle at the vertex.