Impossible triangles

**Name:**

Determine whether the following triangles are possible or impossible.

Use the space below each question to accurately construct them and identify their type.

If a triangle is impossible to classify or construct, ensure you justify your reasoning.

1. A triangle with sides of 15 cm, 4 cm and 5 cm.
2. A triangle with one side of 12 cm and a 90° angle.
3. A triangle with two equal sides of 6 cm and the included angle measuring 60°.
4. An isosceles triangle with equal angles of 100° and equal sides of 10 cm.
5. A triangle with two angles of 60° and one side of 9 cm.
6. An equilateral triangle with all angles measuring 90°.
7. A triangle with one side of 10 cm and two angles of 150° and 120°.
8. An isosceles triangle with equal sides of 15 cm and the included angle measuring 170°.
9. A triangle with sides measuring 12 cm, 10 cm and 8 cm.
10. An equilateral triangle with all sides measuring 6.5 cm.