

Year 7 Mathematics

Concept of Triangles

Name: _____ Class: _____ Score: ____/40

Part A – Identify the Parts of a Triangle (5 pts)

1. A triangle has _____ sides.
2. A triangle has _____ angles.
3. A triangle has _____ vertices.
4. The corners of a triangle are called _____.
5. The sum of the interior angles of every triangle is _____°.

Part B – Name the Triangle (5 pts)

1. A triangle with three equal sides: _____
2. A triangle with two equal sides: _____
3. A triangle with no equal sides: _____
4. A triangle with one right angle: _____
5. A triangle with one obtuse angle: _____

Part C – Classify by Sides (6 pts)

1. 5 cm, 5 cm, 5 cm _____
2. 4 cm, 6 cm, 8 cm _____
3. 9 cm, 9 cm, 7 cm _____
4. 12 cm, 10 cm, 11 cm _____
5. 8 cm, 8 cm, 8 cm _____
6. 3 cm, 4 cm, 3 cm _____

Part D – Classify by Angles (6 pts)

1. 40°, 70°, 70° _____
2. 90°, 50°, 40° _____
3. 110°, 40°, 30° _____
4. 60°, 60°, 60° _____
5. 89°, 45°, 46° _____
6. 95°, 45°, 40° _____

Part E – Find the Missing Angle (10 pts)

Remember: Angles in a triangle add up to 180°.

1. 70° , 60° , _____
2. 45° , 55° , _____
3. 90° , 35° , _____
4. 65° , 65° , _____
5. 30° , 80° , _____

Part F – True or False (5 pts)

1. Every triangle has three sides. _____
2. An equilateral triangle has three equal angles. _____
3. A right triangle has two right angles. _____
4. The sum of the interior angles of a triangle is 180° . _____
5. A scalene triangle has no equal sides. _____

Part G – Challenge Questions (3 pts)

1. A triangle has sides of 7 cm, 7 cm, and 7 cm. It is a _____ triangle.
2. A triangle has one angle measuring 120° . It is an _____ triangle.
3. An isosceles triangle has base angles of 65° each. Find the vertex angle: _____ $^\circ$

Bonus (Optional)

Draw: (1) An equilateral triangle (2) A right triangle (3) A scalene triangle