

Unit 8: Properties of Two-dimensional Shapes

PRACTICE · SET 2

Name: _____ Date: _____

Solve each problem and write your short answer on the line. Use the properties of triangles, quadrilaterals, and lines of symmetry.

1. A triangle has angles measuring 60° , 60° , and 60° . All three sides are equal in length. What is the exact name for this type of triangle by its sides? (equilateral, isosceles, or scalene)

Answer: _____

3. A triangle has angles measuring 40° , 55° , and one unknown angle. Since the three angles of a triangle add to 180° , what is the measure of the third angle in degrees?

Answer: _____

5. A triangle has angles measuring 100° , 45° , and 35° . What is the name for this type of triangle by its angles? (acute, right, or obtuse)

Answer: _____

7. A quadrilateral has exactly one pair of parallel sides. What is the name of this quadrilateral? (trapezoid, parallelogram, or rhombus)

Answer: _____

9. How many lines of symmetry does a regular pentagon (5 equal sides and 5 equal angles) have?

Answer: _____

2. A triangle has one angle that measures 90° . What is the name for this type of triangle by its angles? (acute, right, or obtuse)

Answer: _____

4. A triangle has angles of 30° , 60° , and 90° . Its side lengths are 5 cm, 7 cm, and 9 cm (all different). What is the name for this type of triangle by its sides? (equilateral, isosceles, or scalene)

Answer: _____

6. How many lines of symmetry does a square have?

Answer: _____

8. A quadrilateral has 4 equal sides and 4 right angles. What is the most specific name for this shape? (rectangle, square, or rhombus)

Answer: _____

10. The three angles of a triangle are all equal. Since they must add to 180° , what is the measure of each angle in degrees?

Answer: _____

11. How many lines of symmetry does an equilateral triangle have?

Answer: _____

12. A quadrilateral has all sides equal in length, but its angles are NOT right angles (two angles are 70° and two are 110°). What is the name of this shape? (rhombus, rectangle, or square)

Answer: _____