PEP Grade 8 Math — Unit 18: Parallelograms • Unit Test (Basic)

PEP · Grade 8 · Term 2 · Mathematics · Unit Test · Basic

AI-generated practice paper · original study aid, not an official examination paper · 40 questions · 100 points

Name: _____ Date: _____ Score: _____

Answer all questions. This paper is worth 100 points. Show your working where appropriate.

I. Multiple Choice

1. Which of the following is a defining property of a parallelogram?
   A. All four angles are right angles
   B. Opposite sides are parallel and equal in length
   C. Diagonals are always perpendicular
   D. One pair of opposite sides is parallel

2. In parallelogram ABCD, if angle A measures 75°, what is the measure of angle C?
   A. 75° B. 90°
   C. 105° D. 180°

3. If one diagonal of a parallelogram divides it into two congruent triangles, what can we conclude?
   A. The parallelogram is a rectangle
   B. The diagonals are equal
   C. The parallelogram has two pairs of equal adjacent sides
   D. The diagonal bisects the parallelogram

4. In parallelogram PQRS, if side PQ = 8 cm, what is the length of side SR?
   A. 4 cm B. 8 cm
   C. 16 cm D. Cannot be determined

5. What is the sum of all interior angles in a parallelogram?
   A. 180° B. 270°
   C. 360° D. 720°

6. Which statement about the diagonals of a parallelogram is true?
   A. They are always equal in length
   B. They bisect each other
   C. They are perpendicular
   D. They divide the parallelogram into four equal areas

7. If both pairs of opposite sides of a quadrilateral are parallel, then the quadrilateral is:
   A. a trapezoid B. a rhombus
   C. a parallelogram D. a kite

8. In parallelogram EFGH, if angle F is 110°, what is the measure of angle G?
   A. 70° B. 110°
   C. 180° D. 250°