PEP Grade 8 Math — Unit 11: Triangles • Unit Test (Basic)

PEP · Grade 8 · Term 1 · 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 necessary condition for three line segments to form a triangle?
   A. The sum of any two sides must be less than the third side
   B. The sum of any two sides must equal the third side
   C. The sum of any two sides must be greater than the third side
   D. All sides must be equal in length

2. In triangle ABC, if angle A is 50° and angle B is 60°, what is the measure of angle C?
   A. 70° B. 80°
   C. 90° D. 110°

3. Which type of triangle has all angles less than 90°?
   A. Right triangle B. Obtuse triangle
   C. Acute triangle D. Isosceles triangle

4. If two sides of a triangle are 6 cm and 8 cm, which of the following could be the length of the third side?
   A. 1 cm B. 3 cm
   C. 14 cm D. 15 cm

5. What is the sum of the interior angles of a triangle?
   A. 90° B. 120°
   C. 180° D. 360°

6. In an isosceles triangle, two angles are equal. If one of the equal angles is 55°, what is the measure of the third angle?
   A. 55° B. 60°
   C. 70° D. 80°

7. Which statement about the exterior angle of a triangle is true?
   A. It is always equal to the sum of the two remote interior angles
   B. It is always less than either remote interior angle
   C. It is always equal to the adjacent interior angle
   D. It is always 90°

8. Can a triangle have two right angles?
   A. Yes, because right angles are allowed
   B. No, because the sum would exceed 180°
   C. Only if it is a scalene triangle
   D. Only if it is an isosceles triangle