

Grade 8

Topic: Angles of Triangles

Instructions

Remember, the sum of the interior angles of a triangle is 180°. Show all your steps.

Practice Problems

- 1. Find the missing angle in a triangle with angles 45° and 55° .
- 2. A triangle has angles $x^{\circ}, 2x^{\circ}, 3x^{\circ}$. Find the value of x.
- 3. One angle of a triangle is 90° and another is 35° . Find the third angle.
- 4. Find all angles of a triangle if one angle is twice the second, and the third is three times the second.
- 5. A triangle has angles A, B, C where A = B, and $C = 80^{\circ}$. Find A and B.

Word Problems

1. In the triangle below, two angles are marked as 50° and 60° . Find the missing angle.



2. A triangle has angles in the ratio 2:3:4. Find all angles.



Challenge Question

1. The exterior angle of a triangle is 120° , and one of the interior opposite angles is 50° . Find the other interior opposite angle.

Multiple-Choice Questions

- 1. The sum of the interior angles of a triangle is:
 - A. 90°
 - B. 180°
 - C. 360°
 - D. 270°
- 2. If a triangle has two equal angles of 70° , the third angle is:
 - A. 40°
 - B. 20°
 - C. 50°
 - D. 60°

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