Aksum Math

Name: _____

Triangle & Exterior Angles

Date: _____

Geometry · Grade 8

Score: _____ / 10

Easy · 10 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

1. The sum of interior angles of a triangle is ___°.

Answer: _____

2. Two parallel lines are cut by a transversal. Corresponding angles are ___.

Answer: _____

3. Alternate interior angles formed by parallel lines and a transversal are ___.

Answer: _____

4. Find the exterior angle of a triangle when the two remote interior angles are 40° and 60°.

Answer: _____

5. Co-interior (same-side interior) angles formed by parallel lines and a transversal are ___.

Answer: _____

6. Vertical angles are always ___.

Answer: _____

7. Two parallel lines are cut by a transversal. One corresponding angle is 70°. Find the matching angle.

Answer: _____

8. The sum of exterior angles of any polygon is ___°.

Answer: _____

9. If two angles are alternate interior, what is their relationship for parallel lines?

Answer: _____

10. An exterior angle of a triangle equals the sum of the two ___ interior angles.

Answer: _____

Answer Key Triangle & Exterior Angles — Easy

1. **180**

Triangle angle sum theorem: 180°.

2. **equal**

Corresponding angles formed by parallel lines and a transversal are congruent.

3. **equal**

Alternate interior angles are congruent when lines are parallel.

4. **100°**

Exterior angle = sum of two remote interior angles = 40° + 60° = 100°.

5. **supplementary**

Same-side interior angles sum to 180°.

6. **equal**

When two lines cross, opposite (vertical) angles are congruent.

7. **70°**

Corresponding angles are equal: 70°.

8. **360**

Exterior angle sum of any convex polygon is always 360°.

9. **equal**

Alternate interior angles formed by a transversal cutting parallel lines are congruent.

10. **remote**

Exterior angle theorem: equals the sum of the two remote (non-adjacent) interior angles.