Activity 3 — Exterior and Interior Angle Theorem

Objectives

This activity is designed to help students discover the following theorems:

- ✔ *Triangle Sum Theorem: The sum of the measures of the interior angle of a triangle is 180.*
- ✔ *Exterior Angle Theorem: The measure of an exterior angle of a triangle is equal to the sum of the measures of the two remote interior angles.*

Vocabulary

triangle
interior
how to name an angle
vertex
exterior

Prerequisites

Students must understand how to:

- ✔ *Create and label a triangle.*
- ✔ *Measure and label angles.*

Answers

6. 180.

8. 180.

10. Sum of the interior angles of a triangle is 180.

28. They are equal.

35. $\angle BAC$ and $\angle BCA$.

37. They are equal.

39. They are equal.

40. The exterior angle is equal to the sum of the two remote interior angles.

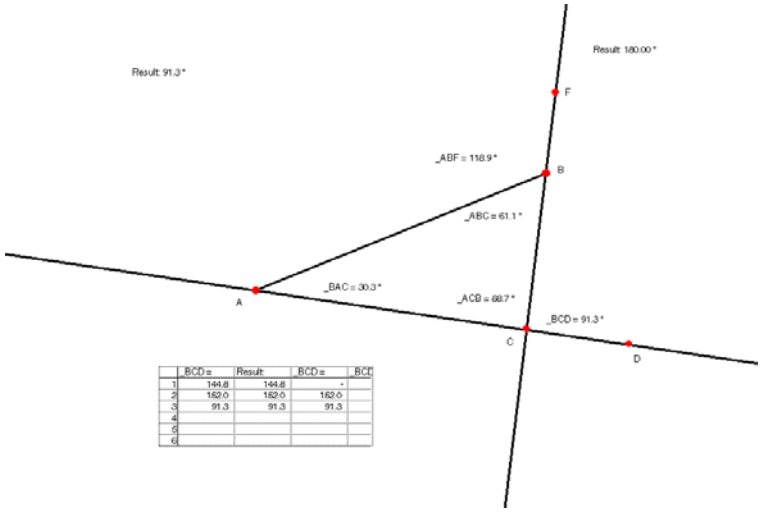

Figure A.1

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