

Activity 4 — Isosceles Triangle

Objectives

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

- ✓ *If two sides of a triangle are congruent, then the angles opposite them are congruent.*
- ✓ *If a triangle is equilateral, then it is also equiangular.*

Vocabulary

triangle	isosceles
equilateral	equiangular
congruent	opposite
adjacent	vertex
angle	side

Prerequisites

Students must understand how to:

- ✓ *Construct and label a triangle.*
- ✓ *Measure and label sides.*
- ✓ *Measure and label angles.*

Answers

2. AB and AC are congruent.
3. $\angle B$ and $\angle C$ are congruent.
4. $\angle B$ is opposite AC .
5. $\angle C$ is opposite AB .
7. If two sides of a triangle are congruent, then the angles opposite them are congruent.
9. If two sides of a triangle are congruent, then the angles opposite them are congruent.
11. The angles are congruent.
13. If a triangle is equilateral, then it is also equiangular.