1 Special Right Triangles

Problem 1. Find $AF$ in the diagram below.
Problem 2. Find $AB$, $AC$, and $AD$ in the diagram below.
2  Similar Triangles

**Problem 3.** Prove the Mother-Daughter Theorem: In every right triangle, the altitude from the right angle to the hypotenuse separates the triangle into two right triangles, each similar to the original.

3  Definitions

Study the following definitions from Sections 7.1 and 7.2 of your textbook before the next class:

1. Similar
2. Implied units
3. Equiangular

You should also study the following similarity tests:

1. Equiangular
2. 3 sides proportional
3. Ratio of 2 sides, incl. \( \angle \)