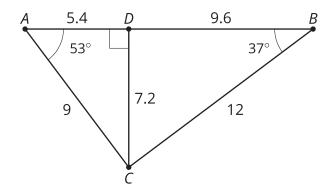
Unit 3 Lesson 13: Using the Pythagorean Theorem and **Similarity**

1 Similar, Right? (Warm up)

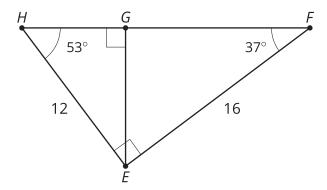
Student Task Statement

Is triangle ADC similar to triangle CDB? Explain or show your reasoning.



2 Tangled Triangles

Student Task Statement

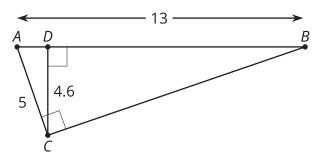


Trace the 2 smaller triangles onto separate pieces of tracing paper.

- 1. Turn your tracing paper and convince yourself all 3 triangles are similar.
- 2. Write 3 similarity statements.
- 3. Determine the scale factor for each pair of triangles.
- 4. Determine the lengths of sides HG, GF, and HF.

3 More Tangled Triangles

Student Task Statement



- 1. Convince yourself there are 3 similar triangles. Write a similarity statement for the 3 triangles.
- 2. Write as many equations about proportional side lengths as you can.
- 3. What do you notice about these equations?

Images for Activity Synthesis

