## The Invisible Radar Triangle Quiz Answer Key

1. How can you determine if the triangles shown below are similar? Express your answer using complete sentences.



To determine if the triangles are similar, one can compare the ratios of the corresponding sides and see if they are equivalent. Measure the corresponding angles and determine if they are congruent. If the corresponding angles are congruent and the ratios of the corresponding sides are equivalent, then the triangles are similar.

- 2. Which triangle is similar to triangle A? Circle one: D В 1.5 В 1.5 1.5 4 С 8 8 Α 3 5 3 6 D 4
- 3. Looking at the two rectangles below, which method could be used to prove that the rectangles are similar?



A. Compare the ratios 6 to 10 and 7 to 4.2 and see if they are equivalent.

B. Compare the ratios 6 to 10 and 4.2 to 7 and see if they are equivalent.

- C. Answers A and B are correct.
- D. Nothing needs to be done since all rectangles are similar.
- 4. What are similar figures?

Similar figures are figures that have the same shape but not necessarily the same size. Their corresponding angles are congruent and their corresponding sides are proportional.

5. What is a scale model?

A scale model is a proportional 3D model of an object that is larger or smaller in size than the actual object.

6. How are triangles used in radar imaging?

Engineers use triangles in radar imaging to calculate the distance between the target and the radar.