

For each problem, complete all information and decide if the triangles are similar.

*****Reasons for non-similar triangles:

- Ⓐ Did not have 2 pairs of congruent angles
- Ⓑ Included angles are not congruent
- Ⓒ 2 pairs of required sides are not proportional
- Ⓓ 3 pairs of required sides are not proportional

1. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

2. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

3. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

4. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

5. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

6. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

7. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

8. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

9. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason:

10. Show any angle relationships:
 Show any side relationships:
 Show work !!!

Are the triangles similar?? Yes/no _____
 If yes, state theorem used. _____
 $\triangle ABC \sim \triangle$ _____
 If no, give reason: