

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

21. 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:

22. 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:

23. 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:

24. 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:

25. 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:

26. 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:

27. 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:

28. 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:

29. 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:

30. 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: