



Name: _____ Date: _____

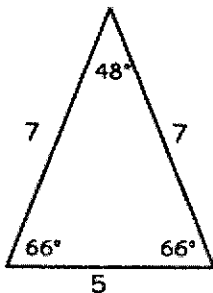
1. Circle any of the following sets of angles that could create a triangle:

- a. $45^\circ, 35^\circ, 90^\circ$
- b. $60^\circ, 59^\circ, 61^\circ$
- c. $150^\circ, 10^\circ, 20^\circ$
- d. $43^\circ, 96^\circ, 42^\circ$

- If the measurements in the above question made a triangle name it by its angles and sides next to it.

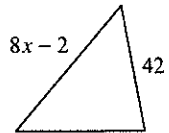
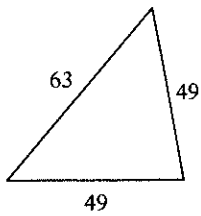
- How did you know which angles could form a triangle? Be specific.

3. Annie created the triangle below. She wants to create a triangle with the same angles but different side lengths. Give two sets of side lengths that would give a triangle with the same angles. Make sure you show your math AND explain in words how you know what you did mathematically will give you what the question is asking for.

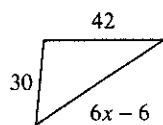
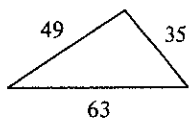


Solve for x . The polygons in each pair are similar.

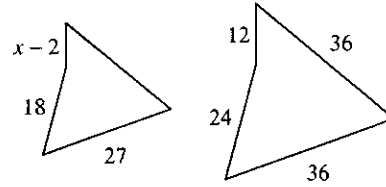
15)



17)



16)



18)

