Math 7 – Assignment #8   Name _____

Problem Solving with Similar Figures   Date _____

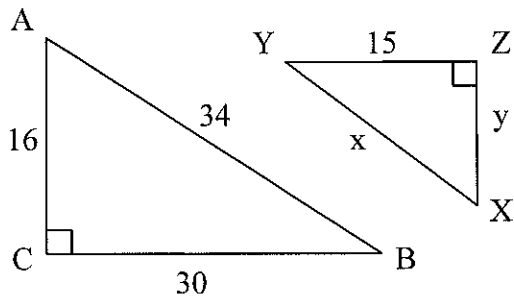**Find the missing side lengths in each pair of similar figures.**

1.   △ABC ~ △XYZ
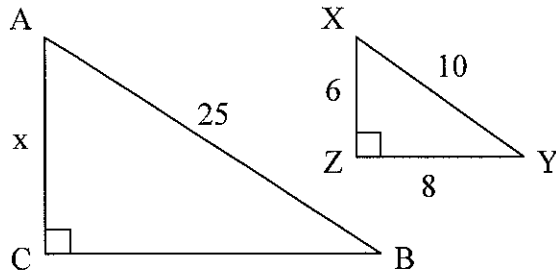
2.   △ABC ~ △XYZ
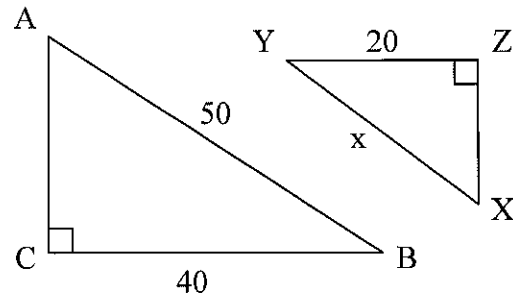
3.   △ABC ~ △XYZ

4.   △ABC ~ △XYZ
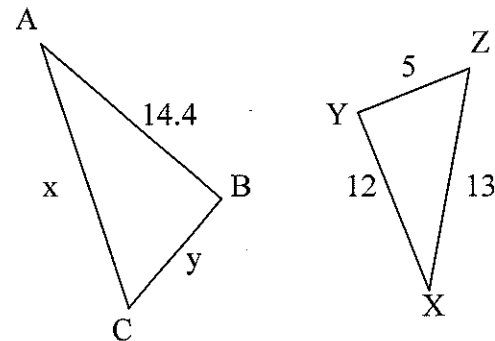
5.   △JKL ~ △GKH
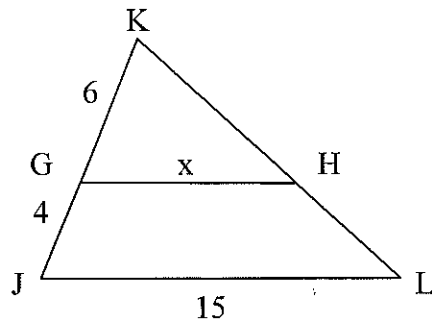
6.   △ABC ~ △ADE
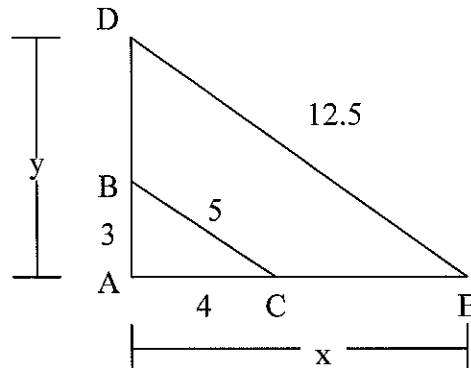
Use similar triangles to find the missing information.

7. A giraffe is 18 feet tall and casts a shadow of 12 feet. Corry casts a shadow of 4 feet. How tall is Corry?

8. When a Ferris wheel casts a 20-meter shadow, a man 1.8 meters tall casts a 2.4-meter shadow. How tall is the Ferris wheel?

9. A flagpole casts a shadow 28 feet long. A person standing nearby casts a shadow eight feet long. If the person is six feet tall, how tall is the flagpole?
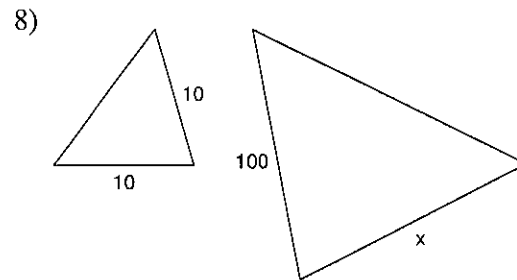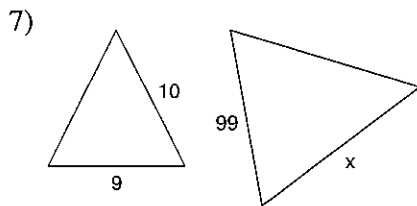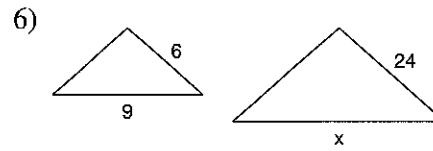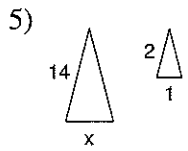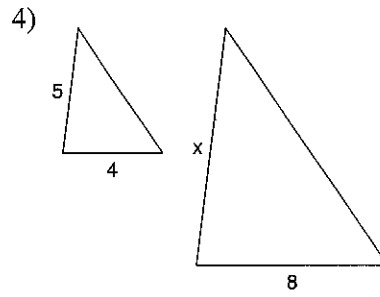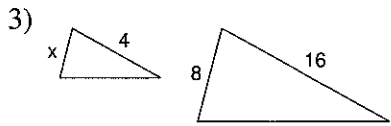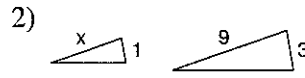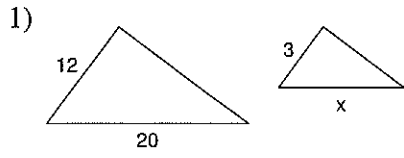
10. A photograph measuring four inches wide and five inches long is enlarged to make a wall mural. If the mural is 120 inches wide, how long is the mural?

11. A 9-foot ladder leans against a building six feet above the ground. At what height would a 15-foot ladder touch the building if both ladders form the same angle with the ground?
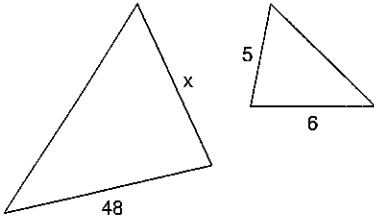
12. Chris wants to reduce a triangular pattern with sides 16, 16 and 20 centimeters. If the longest side of the new pattern is to be 15 cm, how long should the other two sides be?
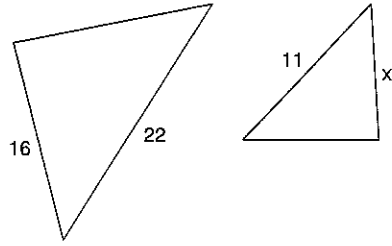
Name_____

Similar Figures

Date_____ Period_____

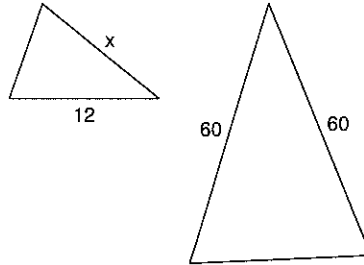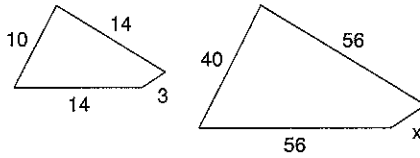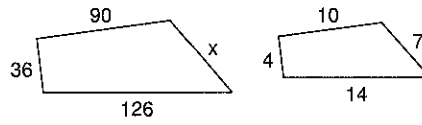**Each pair of figures is similar. Find the missing side.**

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

11)

12)

13)

14)

15)

16)