Lesson 9 ~ Proportions and Similar Figures

Name_____ Period_____ Date_____

The shapes below are similar. Use proportions to solve for each variable.

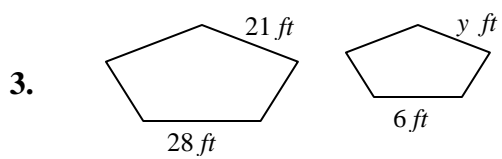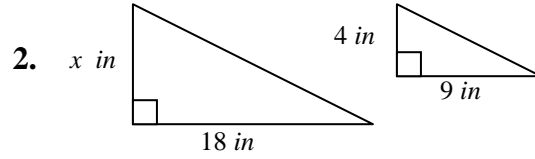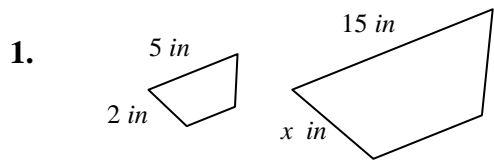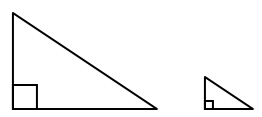**1.**

15 in

5 in

2 in

x in

2. x in

4 in

9 in

18 in

3.

21 ft

y ft

28 ft

6 ft

4.

11 m

44 m

y m

8 m

5.

a ft

8 ft

18 ft

108 ft

6.

18 in

x in

4 in

24 in
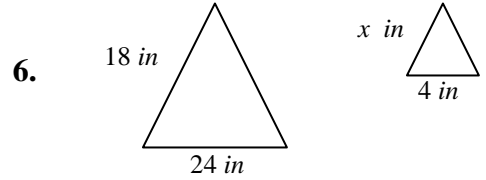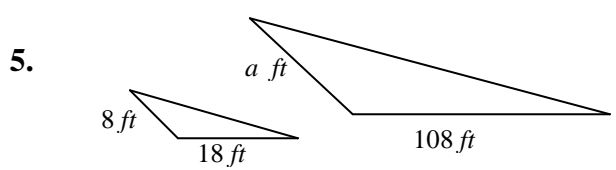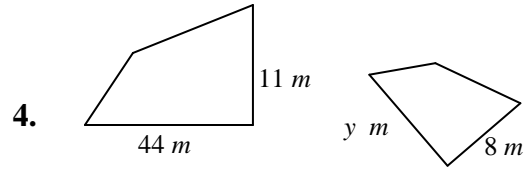
7. Mike wanted to find the height of his pole barn. He measured the shadow from the pole barn on the ground to be 40 feet. He measured his own shadow on the ground to be 12 feet. Mike is 6 feet tall. Find the height of the pole barn.

8. Paula used a mirror to find the height of a tree in her backyard. She found her eye height to be 5.5 feet and her distance to the mirror to be 1.1 feet. The mirror was 12 feet from the tree. Find the height of the tree.