

Exercises

FOR EOG PRACTICE

see page 677

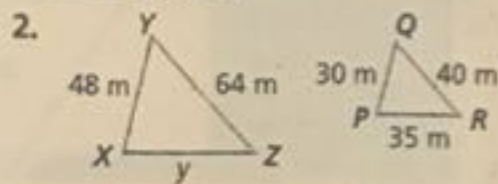
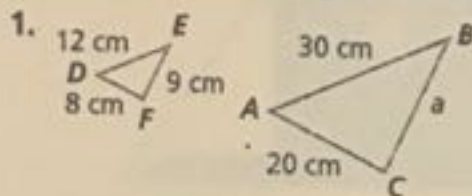
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1.01, 2.01, 3.03

GUIDED PRACTICE

See Example 1 Find the unknown length in each pair of similar figures.



See Example 2 3. The rectangular gardens at right are similar in shape. How wide is the smaller garden?

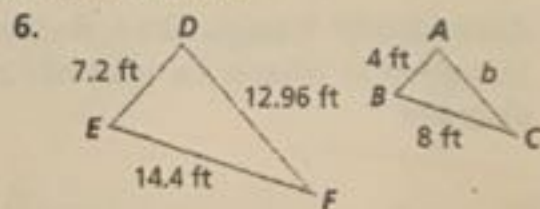
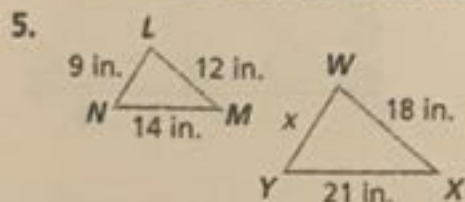


See Example 3 4. A water tower casts a shadow that is 20 ft long. A tree casts a shadow that is 8 ft long. What is the height of the water tower?

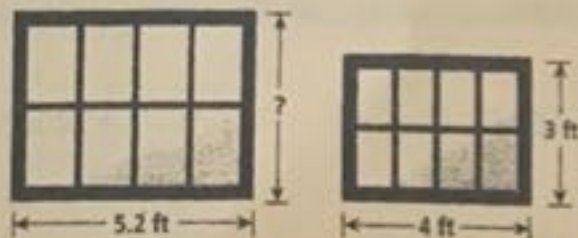


INDEPENDENT PRACTICE

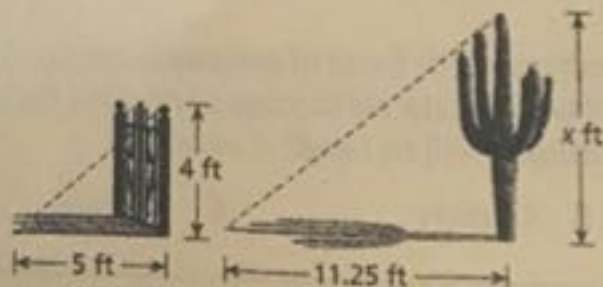
See Example 1 Find the unknown length in each pair of similar figures.



See Example 2 7. The two rectangular windows at right are similar. What is the height of the bigger window?

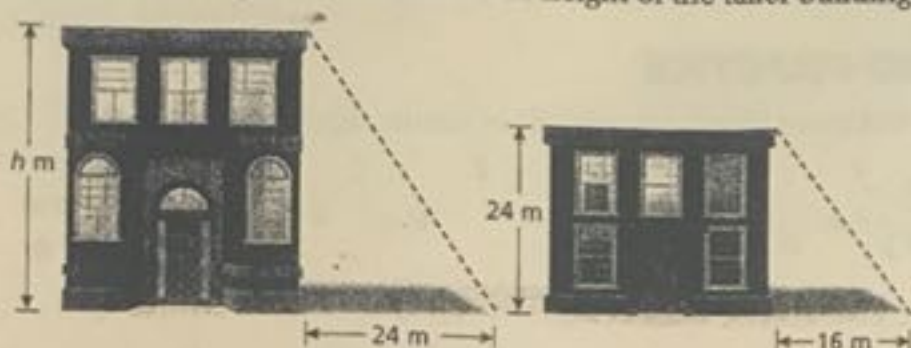


See Example 3 8. A cactus casts a shadow that is 11.25 ft long. A gate nearby casts a shadow that is 5 ft long. What is the height of the cactus?



PRACTICE AND PROBLEM SOLVING

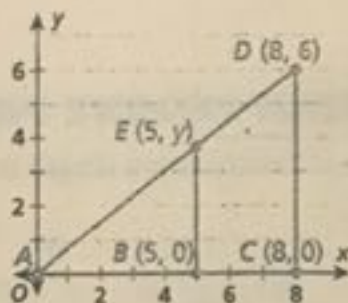
9. A building casts a shadow that is 16 m long while a taller building casts a 24 m long shadow. What is the height of the taller building?



10. **EARTH SCIENCE** An art class is painting a wall mural of the solar system. The table shows the distances of three planets from the Sun in astronomical units (AU) and the corresponding distances planned for the mural. Find the missing distances in the table. Round your answers to the nearest tenth.

Planet	Distance from Sun (AU)	Distance on Mural (yd)
Venus	0.72	■
Earth	1.0	2.5
Mars	■	3.8

11. **WRITE A PROBLEM** Write a problem that can be solved using indirect measurement.
12. **WRITE ABOUT IT** Assume you know the side lengths of one triangle and the length of one side of a second similar triangle. Explain how to use the rules of similar figures to find the unknown lengths in the second triangle.
13. **CHALLENGE** Triangle ABE is similar to triangle ACD . What is the value of y in the diagram?



ral Review

ive. (Lesson 3-6)

$$w + 8 = -5$$

$$15. y - 12 = -1$$

$$16. 4 + m = 51$$

$$17. a - 23 = -23$$

ultiply. (Lesson 4-3)

$$8.6 \cdot 0.13$$

$$19. -5.12 \cdot 6$$

$$20. -7.2 \cdot (-1.9)$$

$$21. 0.45 \cdot 0.23$$

- EOG PREP** Andreas needs $\frac{2}{3}$ cup of cornmeal to make one batch of corn muffins. He needs to make six batches of muffins for a picnic. How many cups of cornmeal will he need? (Lesson 4-7)

A 4 cups

B $4\frac{1}{3}$ cups

C $6\frac{2}{3}$ cups

D $12\frac{2}{3}$ cups

Similar Figures

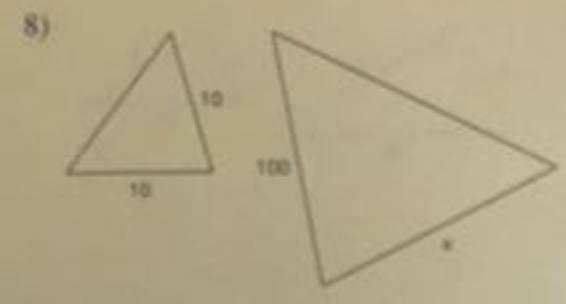
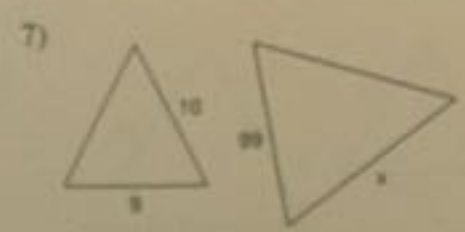
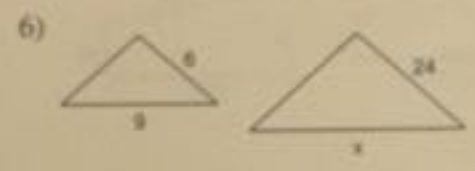
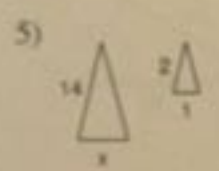
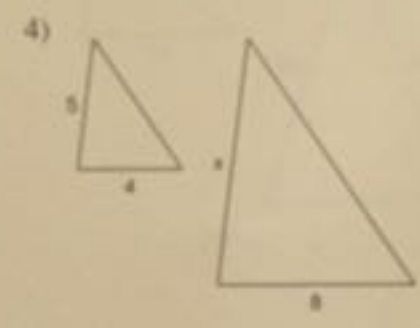
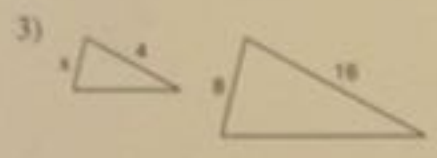
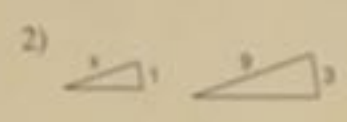
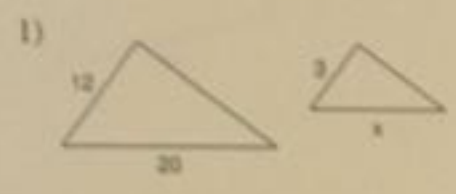
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Name _____

Similar Figures

Date _____ Period _____

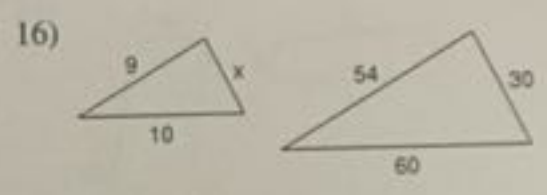
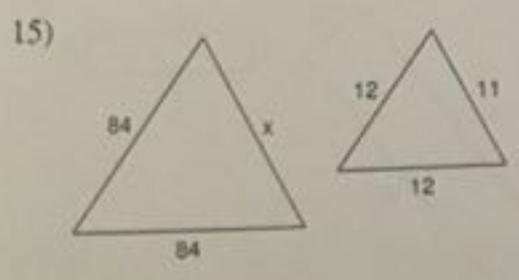
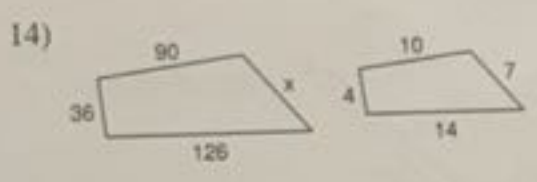
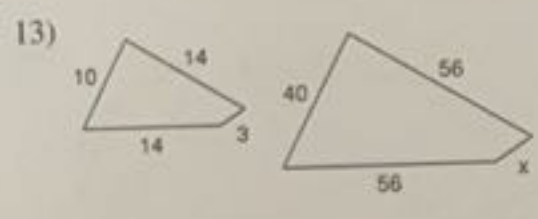
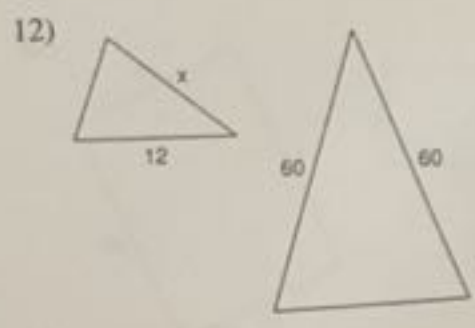
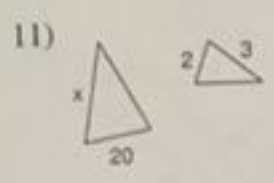
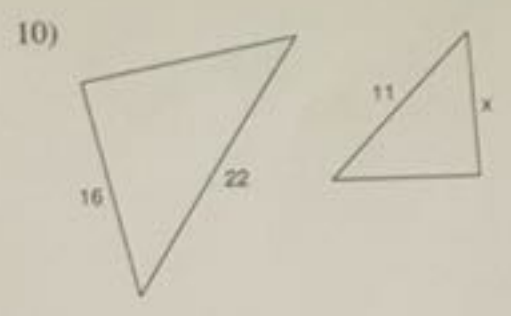
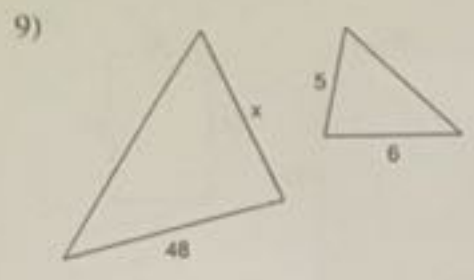
Each pair of figures is similar. Find the missing side.



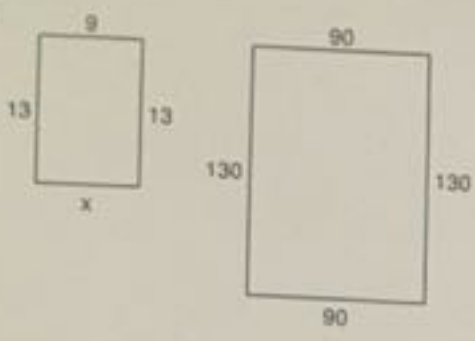
Similar Figures

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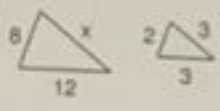
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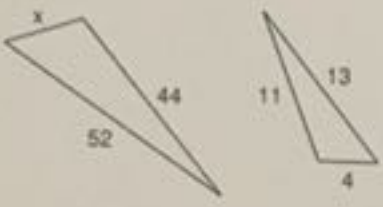
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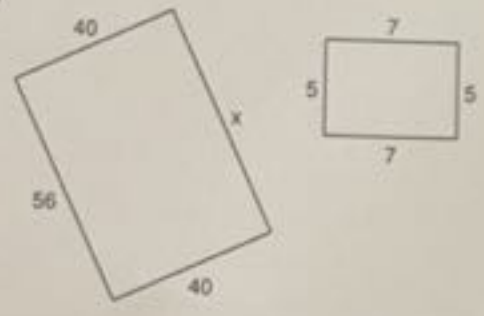
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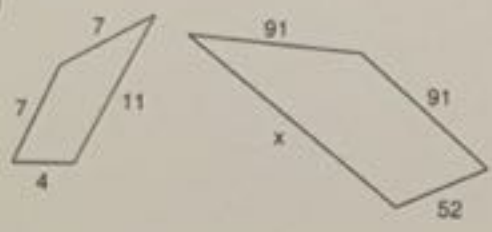
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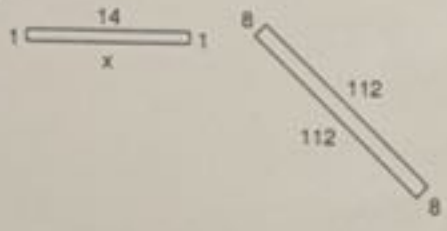
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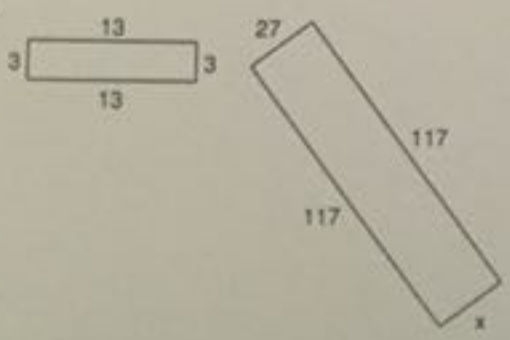
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22)



23)



24)

