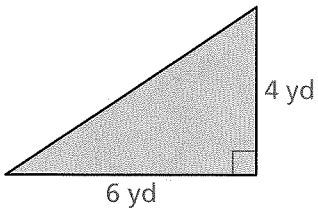
Name: _____

Practice & Problem Solving

Scan for Multimedia

Leveled Practice **In 7–12, find the area of each triangle.**

7.

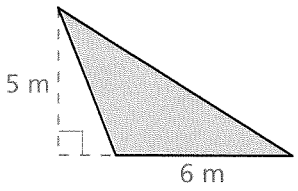


$A = \frac{1}{2}bh$

$= \frac{1}{2} \times \square \times 4$

$= \square$ yd^2

8.

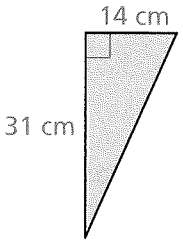


$A = \frac{1}{2}bh$

$= \frac{1}{2} \times \square \times \square$

$= \square$ m^2

9.

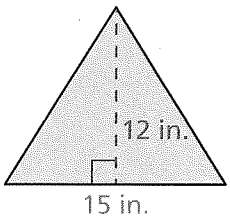


$A = \frac{1}{2}bh$

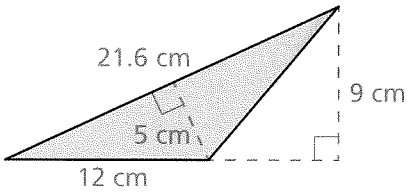
$= \frac{1}{2} \times \square \times \square$

$= \square$ cm^2

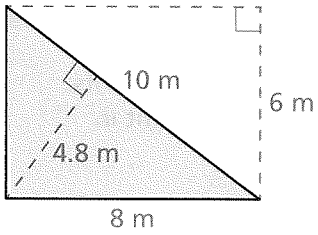
10.



11.



12.

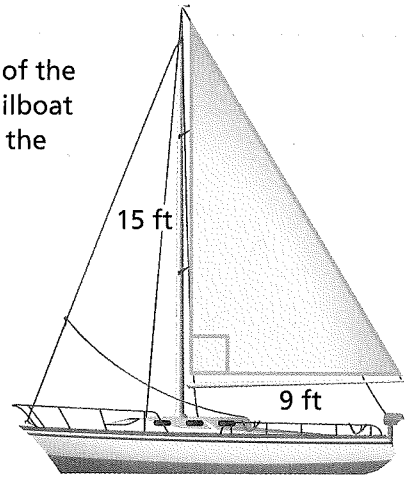


13. The vertices of a triangle are $A(0, 0)$, $B(3, 8)$, and $C(9, 0)$. What is the area of this triangle?

14. Be Precise The base of a triangle is 2 ft. The height of the triangle is 15 in. What is the area of the triangle in square inches?

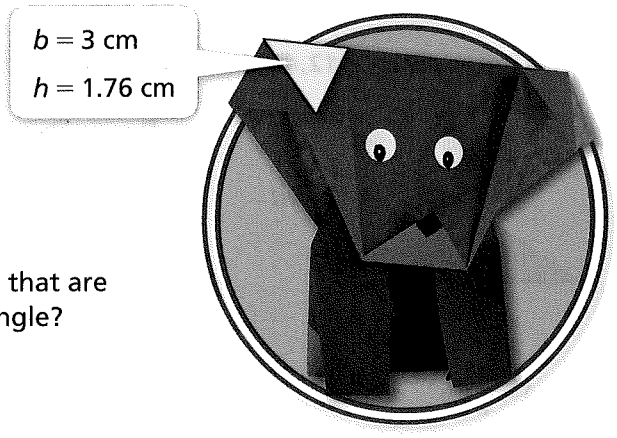
15. Reasoning Ms. Lopez drew $\triangle ABC$, with a height of 6 inches and a base of 6 inches, and $\triangle RST$, with a height of 4 inches and a base of 8 inches. Which triangle has the greater area? Use an area formula to justify your answer.

16. The dimensions of the sail for Erica's sailboat are shown. Find the area of the sail.



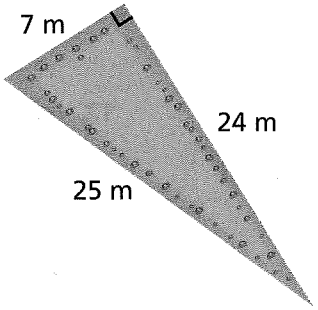
In 17 and 18, use the picture at the right.

17. Be Precise What is the area in square millimeters of the yellow triangle outlined on the origami figure at the right?



18. The nose of the origami dog is a right triangle with sides that are 2 cm, 3 cm, and 3.6 cm long. What is the area of this triangle?

19. Michael is planting a garden in the shape of a right triangle. He wants 4 plants for each square meter of area. How many plants does Michael want in the garden?



20. Higher Order Thinking If you know the area and the height of a triangle, how can you find the base?

Assessment Practice

21. Use each of the three corresponding base and height pairs to find the area of the triangle. Will the area be the same for each calculation? Explain.