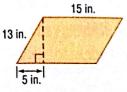
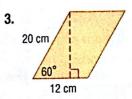


Examples 1-3 Find the perimeter and area of each parallelogram or triangle. Round to the nearest tenth if necessary.

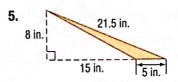
> 1. 13 in



16 ft 20 ft 18 ft

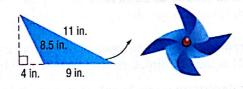


23 m



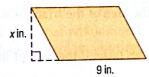
20 mm / - 30 mm 12 mm

7. CRAFTS Marquez and Victoria are making pinwheels. Each pinwheel is composed of 4 triangles with the dimensions shown. Find the perimeter and area of one triangle.

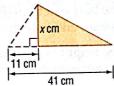


Find x. Example 4





**9.**  $A = 165 \text{ cm}^2$ 

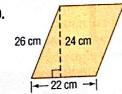


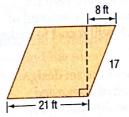
## **Practice and Problem Solving**

Extra Practice begins on page 969.

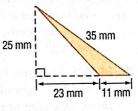
Examples 1-3 Find the perimeter and area of each parallelogram or triangle. Round to the nearest tenth if necessary.

10.



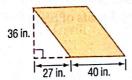


12.

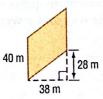


13. 10 m 30 m

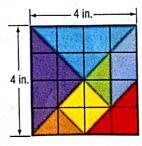
14.



15.

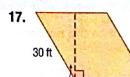


- 16. TANGRAMS The tangram shown is a 4-inch square.
  - a. Find the perimeter and area of the purple triangle. Round to the nearest tenth.
  - b. Find the perimeter and area of the blue parallelogram. Round to the nearest tenth.



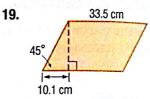
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## **Example 2** Find the area of each parallelogram. Round to the nearest tenth if necessary.

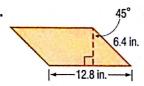


30°

18. 14 mm 60°



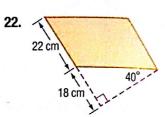
20.



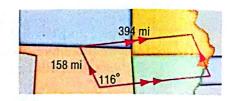
28 ft

21. 24 m

20 m

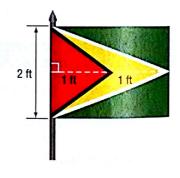


WEATHER Tornado watch areas are often shown on weather maps using parallelograms. What is the area of the region affected by the tornado watch shown? Round to the nearest square mile.



## **Example 4 24.** The height of a parallelogram is 4 millimeters more than its base. If the area of the parallelogram is 221 square millimeters, find its base and height.

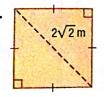
- **25.** The height of a parallelogram is one fourth of its base. If the area of the parallelogram is 36 square centimeters, find its base and height.
- **26.** The base of a triangle is twice its height. If the area of the triangle is 49 square feet, find its base and height.
- **27.** The height of a triangle is 3 meters less than its base. If the area of the triangle is 44 square meters, find its base and height.
- **28. FLAGS** Omar wants to make a replica of Guyana's national flag.
  - a. What is the area of the piece of fabric he will need for the red region? for the yellow region?
  - **b.** If the fabric costs \$3.99 per square yard for each color and he buys exactly the amount of fabric he needs, how much will it cost to make the flag?
- **29. DRAMA** Madison is in charge of the set design for her high school's rendition of *Romeo and Juliet*. One pint of paint covers 80 square feet. How many pints will she need of each color if the roof and tower each need 3 coats of paint?



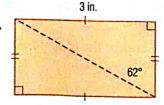


Find the perimeter and area of each figure. Round to the nearest hundredth, if necessary.

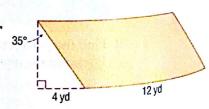
30.



31.



32.



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