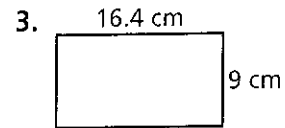
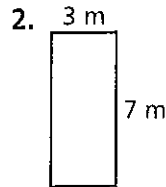
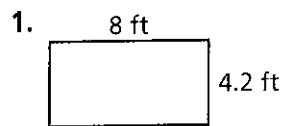


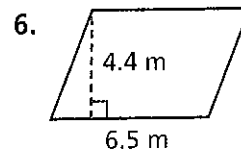
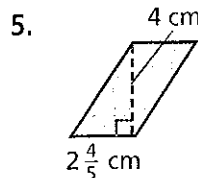
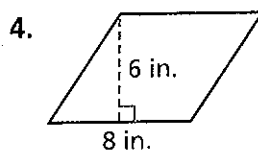
5.04

GUIDED PRACTICE

See Example 1 Find the area of each rectangle.



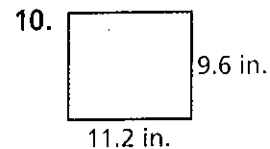
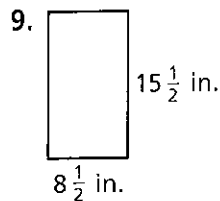
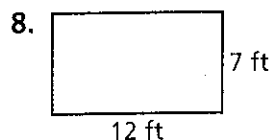
See Example 2 Find the area of each parallelogram.



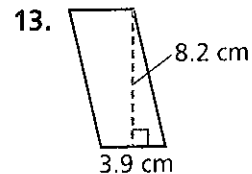
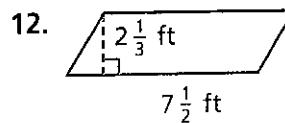
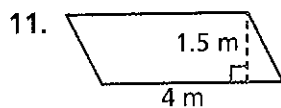
See Example 3 7. Leanne is using 1.5 ft by 1 ft tiles to tile her kitchen floor. If her floor is 10 ft by 6 ft, what is the least number of tiles she will need?

INDEPENDENT PRACTICE

See Example 1 Find the area of each rectangle.



See Example 2 Find the area of each parallelogram.



See Example 3 14. Roberto has four 4 ft by 6 ft carpet remnants that he will use to cover a game room floor. If the floor is 9 ft by 12 ft, does he have enough carpet to cover the floor? Explain.

PRACTICE AND PROBLEM SOLVING

Find the area of each polygon.

15. rectangle: $\ell = 9$ yd; $w = 8$ yd 16. parallelogram: $b = 7$ m; $h = 4.2$ m
 17. rectangle: $\ell = 16$ cm; $w = 12$ cm 18. parallelogram: $b = 2\frac{1}{2}$ ft; $h = \frac{2}{5}$ ft

Graph the polygon with the given vertices. Then find the area of the polygon.

19. $(2, 0), (2, -2), (9, 0), (9, -2)$ 20. $(-3, 1), (-3, 6), (1, 1), (1, 6)$

21. $(1, 2), (3, 5), (7, 2), (9, 5)$ 22. $(4, 1), (4, 7), (8, 4), (8, 10)$

23. What is the height of a parallelogram with an area of 66 in^2 and a base of 11 in.?

24. What is the width of a rectangle with an area of 105 cm^2 and a length of 7.5 cm?

25. **ART** Without the frame, the painting *Girl of Tehuantepec* by Diego Rivera measures about 23 in. by 31 in. The width of the frame is 3 in.




Girl of Tehuantepec by Diego Rivera

a. What is the area of the painting?


b. What is the perimeter of the painting?


c. What is the total area covered by the painting and the frame?

26. A local grocery store has diagonal parking spaces that are shaped like parallelograms. If a space is 9 ft wide and 24 ft long, what is its area?

 27. **CHOOSE A STRATEGY** The area of a parallelogram is 84 cm^2 . If the base is 5 cm longer than the height, what is the length of the base?

A 5 cm B 7 cm C 12 cm D 14 cm

 28. **WRITE ABOUT IT** A rectangle and a parallelogram have sides that measure 3 m, 4 m, 3 m, and 4 m. Do the figures have the same area? Explain.

 29. **CHALLENGE** Two parallelograms have the same base length, but the height of the first is half that of the second. What is the ratio of the area of the first parallelogram to that of the second? What would the ratio be if both the height and the base of the first parallelogram were half those of the second?

Spiral Review

Solve each equation. (Lesson 3-6)

30. $n - 8 = 16$

31. $-12d = -96$

32. $\frac{t}{-6} = 5$

33. $5 + b = 1$


Find the percent of each number. (Lesson 6-3)

34. 25% of 48

35. 72% of 60

36. 4% of 35

37. 30% of 115

38.  **EOG PREP** What is an angle that measures less than 90° called? (Lesson 7-4)

A Right

B Acute

C Obtuse

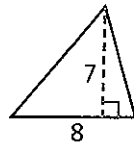
D Straight

5.04

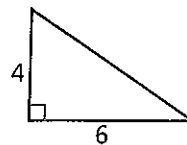
GUIDED PRACTICE

See Example 1 Find the area of each triangle.

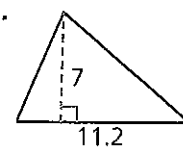
1.



2.

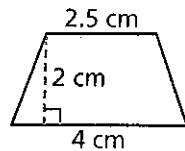


3.

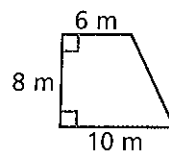


See Example 2 Find the area of each trapezoid.

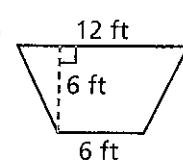
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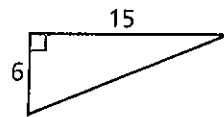
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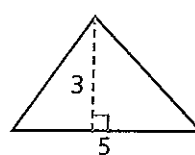
INDEPENDENT PRACTICE

See Example 1 Find the area of each triangle.

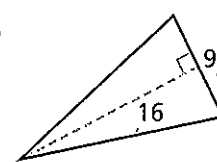
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8.

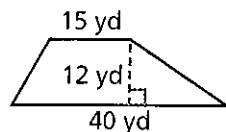


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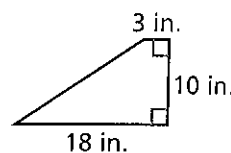


See Example 2 Find the area of each trapezoid.

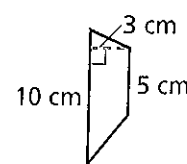
10.



11.



12.



PRACTICE AND PROBLEM SOLVING

Find the missing measurement of each triangle.

13. $b = 8 \text{ cm}$

$h = \square$

$A = 18 \text{ cm}^2$

14. $b = 16 \text{ ft}$

$h = 0.7 \text{ ft}$

$A = \square$

15. $b = \square$

$h = 95 \text{ in.}$

$A = 1,045 \text{ in}^2$

Graph the polygon with the given vertices. Then find the area of the polygon.

16. $(1, 2), (4, 5), (8, 2), (8, 5)$

17. $(1, -6), (5, -1), (7, -6)$

18. $(2, 3), (2, 10), (7, 6), (7, 8)$

19. $(3, 0), (3, 4), (-3, 0)$

20. When the Erie Canal opened, it was 42 ft wide at the top, 28 ft wide at the bottom, and 4 ft deep. Find the area of a trapezoidal cross section of the canal.

21. What is the height of a trapezoid with an area of 9 m^2 and bases that measure 2.4 m and 3.6 m?