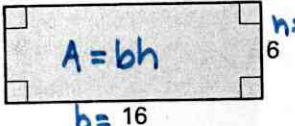
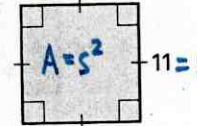
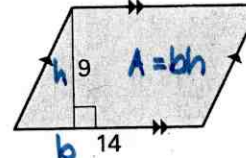


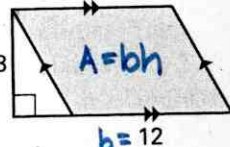
LESSON 11.1 Practice
For use with pages 720-726

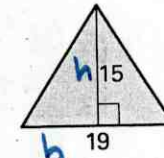
Find the area of the polygon.

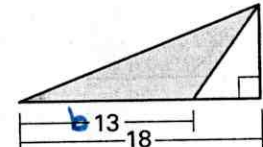
1. 
 $A = bh$
 $b = 16$
 $h = 6$
 $A = 16(6)$
 $A = 96 \text{ u}^2$

2. 
 $A = s^2$
 $11 = 5$
 $A = 11^2$
 $A = 121 \text{ u}^2$

3. 
 $A = bh$
 $b = 14$
 $h = 9$
 $A = 14(9)$
 $A = 126 \text{ u}^2$

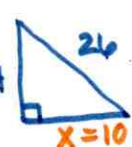
4. 
 $A = bh$
 $h = 8$
 $b = 12$
 $A = 12(8)$
 $A = 96 \text{ u}^2$

5. 
 $A = \frac{bh}{2}$
 $h = 15$
 $b = 19$
 $A = \frac{19(15)}{2}$
 $A = 142.5 \text{ u}^2$

6. 
 $A = \frac{bh}{2}$
 $h = 7$
 $b = 18$
 $A = \frac{18(7)}{2}$
 $A = 63 \text{ u}^2$

The lengths of the hypotenuse and one leg of a right triangle are given. Find the perimeter and area of the triangle.

7. Hypotenuse: 26 cm; leg: 24 cm

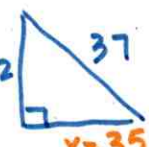

 $26^2 = x^2 + 24^2$
 $676 = x^2 + 576$
 $x^2 = 100$
 $x = 10$

$A = \frac{24(10)}{2}$
 $A = 120 \text{ cm}^2$

8. Hypotenuse: 50 mm; leg: 14 mm

$P = 24 + 26 + 10$
 $P = 60 \text{ cm}$

9. Hypotenuse: 37 ft; leg: 12 ft


 $37^2 = x^2 + 12^2$
 $1369 = x^2 + 144$
 $x^2 = 1225$
 $x = 35$

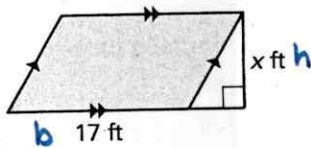
$A = \frac{35(12)}{2}$
 $A = 210 \text{ ft}^2$

10. Hypotenuse: 85 in.; leg: 77 in.

$P = 35 + 12 + 37$
 $P = 84 \text{ in}$

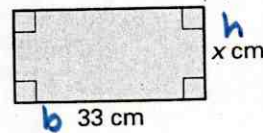
Find the value of x.

11. $A = 153 \text{ ft}^2$ $A = bh$



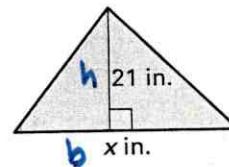
$153 = 17x$
 $x = 9 \text{ ft}$

12. $A = 528 \text{ cm}^2$ $A = bh$



$528 = 33x$
 $x = 16 \text{ cm}$

13. $A = 399 \text{ in.}^2$ $A = \frac{bh}{2}$

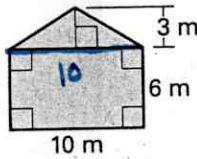


$399 = \frac{21x}{2}$
 $798 = 21x$
 $x = 38 \text{ in}$

LESSON 11.1

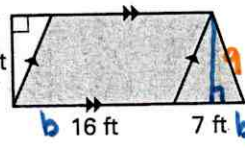
Practice *continued*
For use with pages 720-726

Find the area of the shaded polygon.

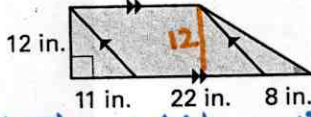
14.  $A(\square) + A(\triangle)$
 $60 + 15$
 $A = 75\text{m}^2$

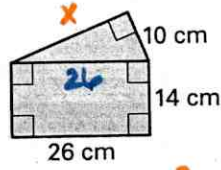
$A = bh$
 $10(6) = 60$

$A = \frac{bh}{2}$
 $\frac{10(3)}{2} = 15$

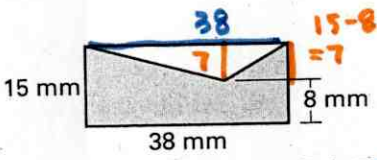
15.  $A(\square) + A(\triangle)$
 $144 + 31.5$
 $A = 175.5\text{ft}^2$

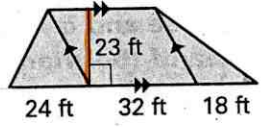
$A(\square) = 16(9) = 144$
 $A(\triangle) = \frac{7(9)}{2} = 31.5$

16.  $A(\triangle) + A(\square) + A(\triangle)$
 $\frac{11(12)}{2} + 22(12) + \frac{8(12)}{2}$
 $66 + 264 + 48$
 $A = 378\text{in}^2$

17.  $A(\square) + A(\triangle)$
 $364 + 120$
 $A = 484\text{cm}^2$

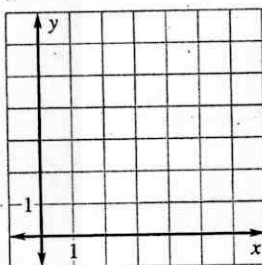
$26^2 = 10^2 + x^2$
 $676 = 100 + x^2$
 $576 = x^2$
 $x = 24$

18.  $A(\square) - A(\triangle)$
 $38(15) - \frac{38(7)}{2}$
 $570 - 133$
 $A = 437\text{mm}^2$

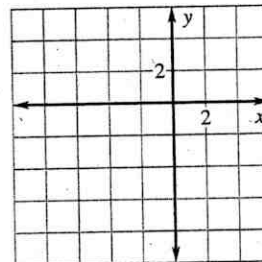
19.  $A(\triangle) + A(\square) + A(\triangle)$
 $\frac{24(23)}{2} + 32(23) + \frac{18(23)}{2}$
 $276 + 736 + 207$
 $A = 1219\text{ft}^2$

Graph the points and connect them to form a polygon. Find the area of the polygon.

20. $A(2, 2), B(3, 6), C(5, 6), D(4, 2)$



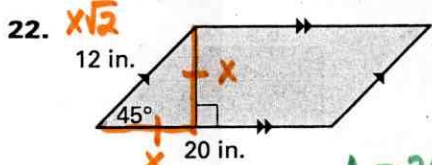
21. $P(-4, -4), Q(-1, -1), R(5, -4)$



LESSON
11.1

Practice *continued*
For use with pages 720–726

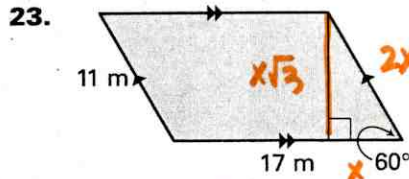
Find the height and area of the polygon.



$x = 6\sqrt{2}$
 $x\sqrt{2} = 12$

$h = 6\sqrt{2}$

$A = 20(6\sqrt{2})$
 $A = 120\sqrt{2} \text{ in}^2$



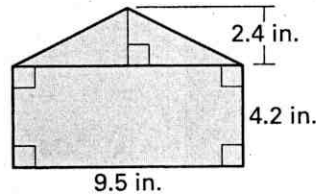
$2x = 11$
 $x = 5.5$
or $\frac{11}{2}$

$h = \frac{11\sqrt{3}}{2}$ $A = \frac{17(11\sqrt{3})}{2}$

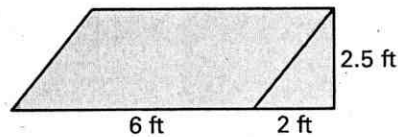
$x\sqrt{3} = \frac{11\sqrt{3}}{2}$

$A = \frac{187\sqrt{3}}{2} \text{ m}^2$

24. **Envelopes** You have an envelope that is 9.5 inches by 4.2 inches and has a triangular flap with a height of 2.4 inches. What is the area of the envelope shown in the diagram?



25. **Floor Tile** You have a piece of floor tile in the shape of a parallelogram that has a base of 6 feet and a height of 2.5 feet. You cut a triangular piece of tile with a base of 2 feet to fit next to the other piece, as shown. Find the total area of the tile in square feet and square inches.



26. **Painting** A painter is painting the back of your garage, which has the measurements shown. The painter can paint 200 square feet per hour and charges \$25 per hour. How much will you have to pay if the painter rounds the time spent painting to the nearest half hour?

