Name _____ **Date** _____

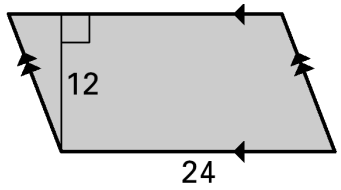
LESSON 11.1

Practice C

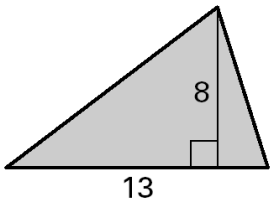
For use with pages 720–726

Find the area of the polygon.

1.

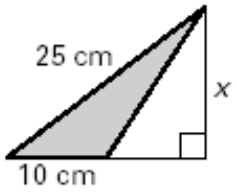


2.

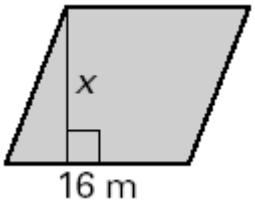


Find the value of *x*.

3. Area = 70 cm^2



4. Area = 104m^2



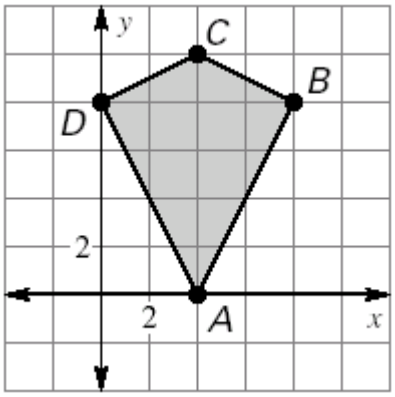
The lengths of the hypotenuse and one leg of a right triangle are given. Find the perimeter and area of the triangle.

5. Hypotenuse: 17 ft; leg: 8ft

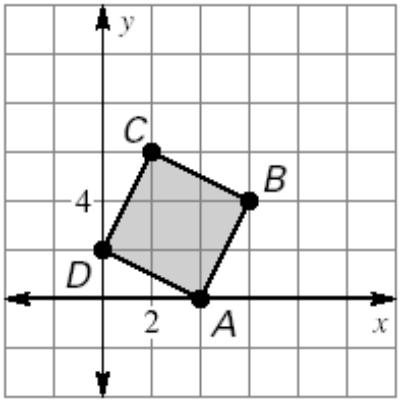
6. Hypotenuse: 85 mm; leg: 36 mm

Find the area of the quadrilateral.

7.

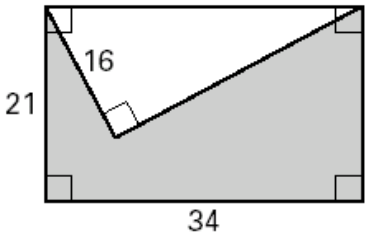


8.

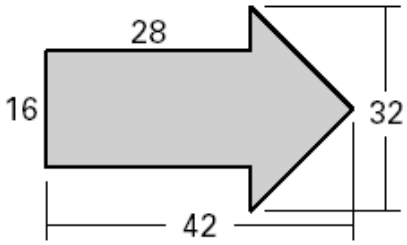


Find the area of the shaded polygon.

9.



10.



11. Algebra The area of a triangle is 225 square units. The base of the triangle is twice the height. Find the base and the height.

12. Algebra The area of a parallelogram is 216 square centimeters. The height of the parallelogram is two thirds its base. Find the base and the height.

13. Algebra The area of a square is 256 square units. Find the side length and perimeter of the square.

14. Algebra The area of a rectangle is 84 square inches. The length of the rectangle is 2 inches longer than twice the width. Find the width and the perimeter of the rectangle.

15. Heron's Formula Another way to find the area of a triangle is to use Heron's Formula. The formula is $A = \sqrt{s(s-a)(s-b)(s-c)}$ where A is the area of the triangle, a, b, and c are side lengths, and s is one half the perimeter of the triangle. Use the triangle at the right to justify Heron's Formula.