

# Polygons on the Coordinate Plane



## Guided Practice

Use the coordinates to find the length of each side of the rectangle.  
Then find the perimeter. (Examples 1 and 2)

1.  $L(3, 3), M(3, 5), N(7, 5), P(7, 3)$

2.  $P(3, 0), Q(6, 0), R(6, 7), S(3, 7)$

Show  
your  
work.

3. Mrs. Piel is building a fence around the perimeter of her yard for her dog. The coordinates of the vertices of the yard are  $(0, 0), (0, 10), (5, 10),$  and  $(5, 0)$ . If each grid square has a length of 100 feet, find the amount of wire, in feet, needed for the fence. What is the shape of her yard? (Example 3)

## Independent Practice

Use the coordinates to find the length of each side of the rectangle.  
Then find the perimeter. (Examples 1 and 2)

1.  $D(1, 2), E(1, 7), F(4, 7), G(4, 2)$

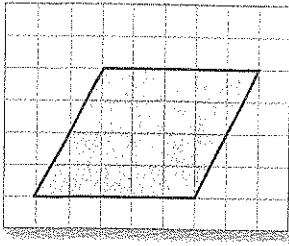
2.  $Q(0, 0), R(4, 0), S(4, 4), T(0, 4)$

Show  
your  
work.

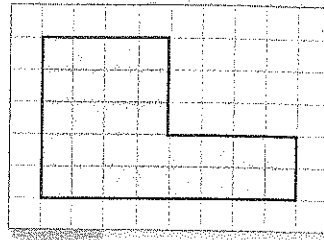
3. Natasha is building a rectangular picture frame for her favorite photo. The coordinates of the vertices of the frame are  $(0, 0), (0, 8), (12, 8),$  and  $(12, 0)$ . Each grid square has a length of 3 centimeters. Find the amount of wood, in centimeters, needed for the perimeter. (Example 3)

Find the area of each figure in square units. (Example 4)

4.

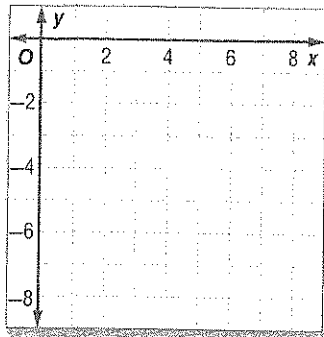


5.

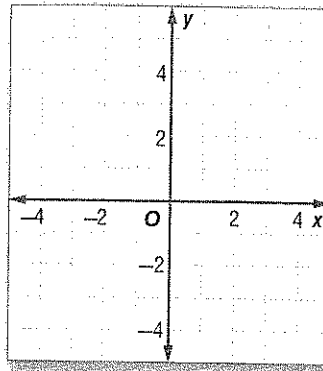


Graph each figure and classify it. Then find the area. (Example 5)

6.  $R(3, -2), S(7, -2), T(8, -6), V(1, -6)$

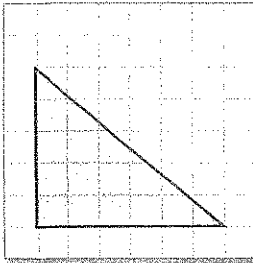


7.  $A(-3, -4), B(-3, 5), C(2, 5), D(2, -4)$

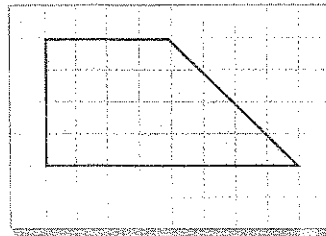


Find the area of each figure in square units.

16.

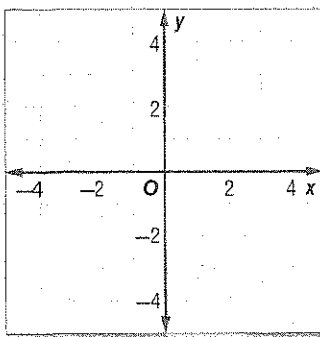


17.



Graph each figure and classify it. Then find the area.

18.  $G(-4, 1), H(4, 1), I(3, -3), J(-1, -3)$



19.  $X(-7, 2), Y(-7, 6), Z(-4, 2)$

