

Speak Like A Mathematician:

plane figure:

polygon:

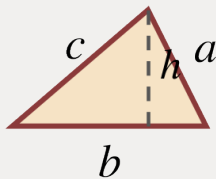
vertex:

convex:

concave:

Perimeter and Area

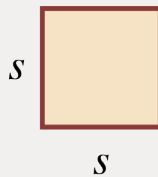
Triangle



$P =$ _____

$A =$ _____

Square



$P =$ _____

$A =$ _____

Rectangle



$P =$ _____

$A =$ _____

Example 1 - Name That Polygon

Complete the chart with the name of each polygon.

3 sides: _____ 8 sides: _____

4 sides: _____ 9 sides: _____

5 sides: _____ 10 sides: _____

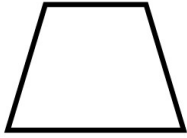
6 sides: _____ 12 sides: _____

7 sides: _____ n sides: _____

Example 2 – Polygon or Not?

Tell whether each figure is a polygon. If it is, name it by its number of sides.

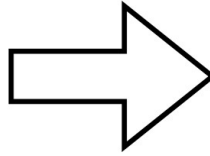
a.)



b.)



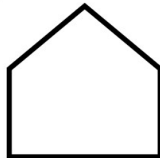
c.)



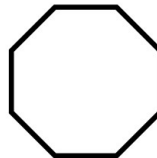
d.)



e.)



f.)



a.) _____ b.) _____

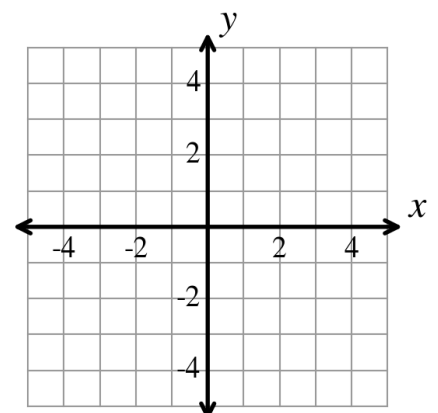
c.) _____ d.) _____

e.) _____ f.) _____

Example 3 – Perimeter & Area: Triangle

Plot the points, draw the triangle, then find its perimeter AND its area.

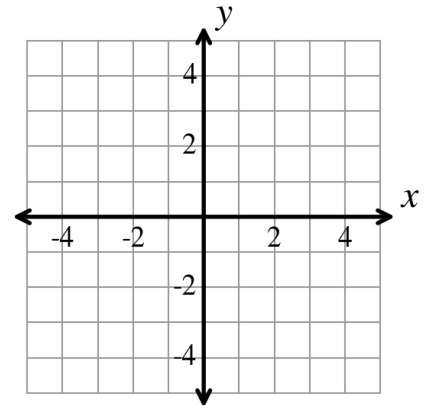
A(-4, 2) B(3, 4) C(0, -3)



Example 4 – Perimeter & Area: Quadrilateral

Plot the points, draw the quadrilateral, then find its perimeter AND its area.

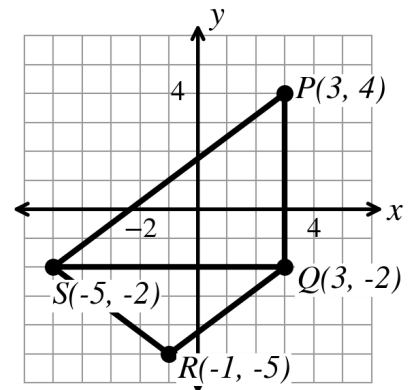
$W(-4, 2)$ $X(3, 5)$ $Y(5, -2)$ $Z(-2, -4)$



Example 5 – Break It Apart

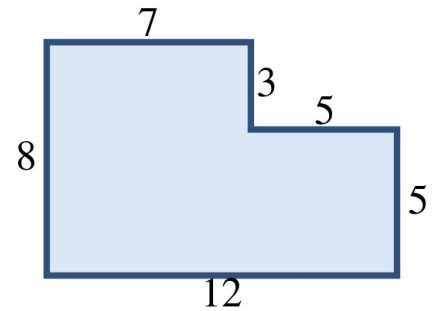
The diagonal QS divides quadrilateral $PQRS$ into two triangles. Use the figure.

- Find the perimeter of $\triangle PQS$.
- Find the perimeter of $\triangle QRS$.
- Find the perimeter of quadrilateral $PQRS$.
- Find the area of $\triangle PQS$.
- Find the area of $\triangle QRS$.
- Find the area of quadrilateral $PQRS$.



Example 6 – Composite Figures

Find the perimeter AND the area of the figure.



Example 7 – Composite Area

Find the area of the figure. Hint: break it into a rectangle and a triangle.

