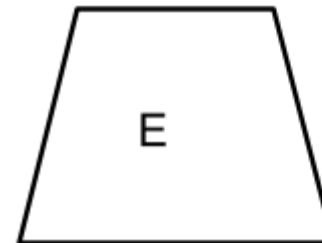
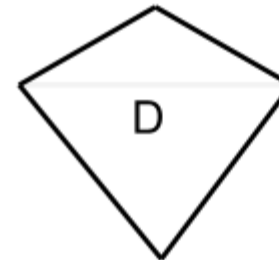
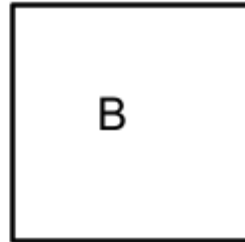
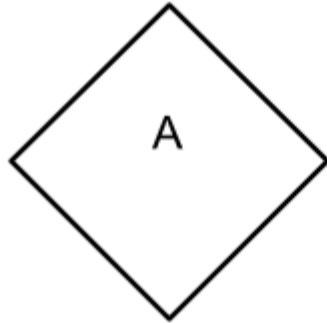


What is a Quadrilateral?



Quadrilaterals:
Polygons

Plane Figures

parallelogram, rectangle,
square, trapezoid, rhombus,
kite

"Simply put, geometry is the study of the size, shape and position of 2 dimensional shapes and 3 dimensional figures. However, geometry is used daily by almost everyone. In geometry, one explores spatial sense and geometric reasoning. Geometry is found everywhere: in art, architecture, engineering, robotics, land surveys, astronomy, sculptures, space, nature, sports, machines, cars and much more. ([Reference Site](#))"

Wonderful mathematicians study figures carefully. Color each figure in the chart above in a different color, then cut out the images in order to compare size, shape, and properties.

Category	The similar and not similar properties (characteristics, traits) I notice.
Shape	
Sides	
Dimension	
Size	
Vertices (corners)	
Angles	

Vocabulary

Study the vocabulary and complete the checklist below for each figure in the image above.

- A **polygon** is a closed, plane (two-dimensional) shape/figure with straight sides.
- A 2 dimensional closed figure is called a **plane figure**.
- A **quadrilateral or quadrangle** is 2 dimensional closed plane shape/figure with four straight sides and four angles.
- A **parallelogram** is a 2-dimensional, plane quadrilateral with two sets of parallel sides.
- A **kite** is a 2-dimension, plane shape/figure with straight sides. It has 2 pairs of equal adjacent (next to each other) sides.
- A **square** is a 2-dimensional, plane parallelogram/rectangle/rhombus with 4 equal sides and every angle is a right angle (90°)
- A **rectangle** is a four-sided 2-dimensional parallelogram where every angle is a right angle (90°).
- A **rhombus** is a 2 dimensional parallelogram with 4 **equal** straight sides.
- A **trapezoid** is a quadrilateral with only one pair of parallel sides.

Study the figures in the illustration. Check the categories that apply to each figure.

Figure	plane figure two-dimension "flat"	polygon	quadrilateral quadrangle	parallelogram	rectangle	square	rhombus	kite	trapezoid
A									
B									
C									
D									
E									

Geometry Open Response Problem Practice

Complete two or more quadrilateral cards with the following information.

- Draw a picture of any quadrilateral/quadrangle. Label the quadrilateral with all the names that apply.
- Complete the quadrilateral card property table.
- Study the quadrilaterals that you drew. Is the figure symmetrical? If so draw a dotted line to show the line(s) of symmetry.

Draw a picture of the figure in the space above.

Property	Description of Properties
Number of Sides : Are the sides congruent (equal). Are the sides parallel?	
Number of Angles : Are the angles obtuse, acute, or right (90 degree) angles?	
Number of vertices (corners) :	
Is it a regular quadrilateral ? (all sides equal)	
Is the figure symmetrical ? How many	
Name(s) of Figure Circle the most specific name.	

Draw a picture of the figure in the space above.

Property	Description of Properties
Number of Sides : Are the sides congruent (equal). Are the sides parallel?	
Number of Angles : Are the angles obtuse, acute, or right (90 degree) angles?	
Number of vertices (corners) :	
Is it a regular quadrilateral ? (all sides equal)	
Is the figure symmetrical ? How many	
Name(s) of Figure Circle the most specific name.	

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Draw a picture of the figure in the space above.

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Draw a picture of the figure in the space above.

Property	Description of Properties
Number of Sides : Are the sides congruent (equal). Are the sides parallel?	
Number of Angles : Are the angles obtuse, acute, or right (90 degree) angles?	
Number of vertices (corners) :	
Is it a regular quadrilateral ? (all sides equal)	
Is the figure symmetrical ? How many	
Name(s) of Figure Circle the most specific name.	

Self Assessment

Name: _____

Read each statement and check the box that describes your work

Learning Action	Yes	Sometimes	No
1. I carefully studied each figure.			
2. I cut out the shapes and moved them around as I assessed their properties.			
3. I compared the figures and listed as many properties as I could see.			
4. I compared the figures as I filled out the name checklist.			
5. I created at least one quadrilateral card completely.			

Teacher/Student Comments
