

LESSON 2



CA Standards
MG 2.0 Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

KEY MG 2.1 Identify, describe, and classify polygons (including pentagons, hexagons, and octagons).

Also MR 1.0, MR 2.4, MR 3.0, MR 3.3

Vocabulary

plane figure

circle

polygon

side

vertex

triangle

quadrilateral

pentagon

hexagon

octagon

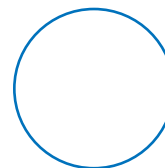
Plane Figures

Objective Identify, describe, and classify plane figures.

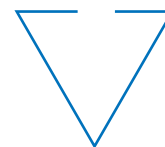
Learn by Example

In Lesson 1, you learned about line segments and angles. **Polygons** are **plane figures** that are made up of line segments and angles.

Plane figures are flat figures. They can be closed or not closed. A **circle** is a closed plane figure.



closed

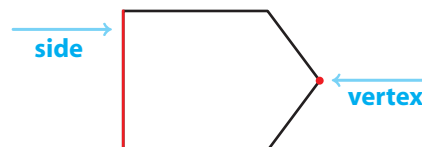


not closed

Polygons

Polygons are closed plane figures that have three or more sides.

The name of a polygon tells the number of sides.

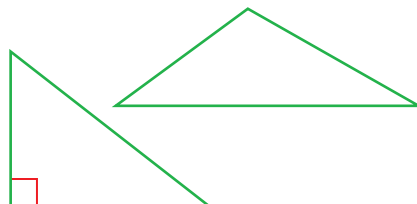


Each **side** is a line segment.

A **vertex** is a point where two sides meet.

Triangle

3 sides



Quadrilateral

4 sides



Pentagon

5 sides



Hexagon

6 sides



Octagon

8 sides



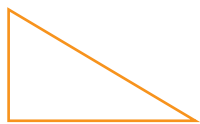
Guided Practice

Tell whether the figure is a polygon.
If it is, write its name.

Ask Yourself

- Is the figure closed?
- How many sides does the figure have?

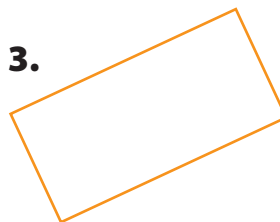
1.



2.



3.



4.



5.



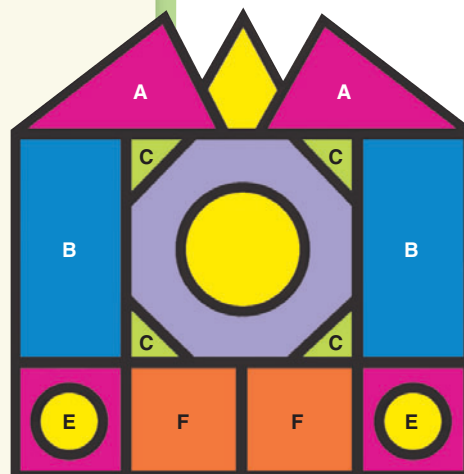
6.



Guided Problem Solving

Use the questions to solve this problem.

7. Sort the plane figures that are marked with a letter into two or more groups.
 - a. **Understand** What are you asked to do?
 - b. **Plan** How can you sort the figures?
 - c. **Solve** Use your rule. Sort the figures.
 - d. **Look Back** How can you check that you included all the figures?



8. Look back at Problem 7. Sort the figures in another way.



Math Talk Is a circle a polygon?
Explain why or why not.